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actually has provided the Orokaiva with a reliable and substantial cash income for some years. This is true to a very minor extent for the third cash crop promoted on a major scale, copra, which was grown especially near the coast. The coffee is processed and sent to a co-operative factory as parchment, for which purpose many villages own one or more hullers. Copra is supposed to be dried in driers built in the villages, but the one I saw in Inonda had broken down and seems unlikely to be repaired.

Clothing. The traditional Orokaiva costume was a skirt for women and a perineal band for men (Williams 1930: 32–4). Boys went naked until some time before puberty, girls until after puberty seclusion. These garments were made of barkcloth obtained from trees which were mostly grown in gardens for this purpose. Larger garments were used for wrapping round the shoulders in cold weather, and also for shrouds. This mode of dress was abandoned in the 1950s, so that today the Orokaiva buy their clothes almost entirely from trade stores and at mission bazaars. Traditional dress is used for dances, initiation ceremonies and other special occasions. For this reason bark-cloth trees (such as the *ajimo*) are found rather infrequently in gardens today. Bark-cloth is still being painted with decorations in traditional style and with a mixture of traditional and trade dyes.

Housing. Villages are in flat clearings where the grass is kept scrupulously cut and from which the women regularly sweep away rubbish. Houses (*bande*) are built in two facing rows, each house normally being occupied by one nuclear family. The roof of sago thatch slopes down from a central ridgepole. Wall construction has been in various styles since Australian contact, but today vertically set sago-branch midribs are becoming old fashioned in some areas and vertically laid shingles, about 6 ft. by 5⅜ ins., are being adopted in villages desiring to show they are tuned in to modern life. A great number of tree species must be used for the various parts of the house. Materials are taken as much as possible from reverted gardens which contain small trees. For a number of purposes large trees with trunks of high-quality slow-growing wood are considered essential. These trees have to be obtained from areas of bush much older than the usual reverted gardens. On the Mount Lamington foothills, such areas are very scarce. Trees of this quality tend to be the subject of gift exchange as between families, a subject to be discussed below.

Though it is each man's responsibility to build his own house, it is usual to call on helpers, especially sons, brothers and brothers-in-law, to help with construction. Recent changes in house construction include the increasing use of nails, though not for flooring; a remarkable increase in house sizes; the change in wall construction already mentioned, and a number of measures to 'improve' hygiene: lavatories, rubbish holes, pens for chickens, windows. The windows, an innovation promoted by the government to combat tuberculosis, are considered too uncomfortable in cold, wind or rain. Accordingly, they are always covered over with pieces of timber which can be removed if the patrol officer insists.[6]

Bachelors' houses (*oro*) are of precisely the same size and construction as the ordinary *bande*. The more prominent men of the village build themselves small meeting platforms, covered with a roof but lacking walls, for the entertainment of visitors (*arara*). In the gardens, we find small houses with an earth floor, no walls, but a platform just below roof level. People sit in these garden houses

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TABLE II/5 (*continued*)

Activity	*Total hours*	*Percentage contrib.**
Both		*Men*
Paid work	1,128.8	56
Other crops – harvest	1,109.0	54
Sick – personal	442.6	53
Yam – harvest	412.6	53
Coffee – process	398.4	53
Collecting firewood	234.1	52
Social obligations – mourning	783.9	51
Other crops – market	66.9	51
Church services	1,946.2	46
Meetings	898.7	44
Fishing	165.0	44
Council work	824.2	42
Taro – maintain	2,551.6	37

* Where one sex carries out more than two-thirds of the work and where the total amount exceeds .01 per cent (29.0 hours) of the total hours active for the whole sample.

there is a ritual prohibition, for which I shall later quote the mythological charter, to hold a feast at all. 433 437

In any case, there seem to be two basic limitations to the size of a feast. First, the custom of restricting the number of guests to the inhabitants of *one* village, usually of about the same size as the inviting village. There are of course many variations to this custom but the principle of limitation is usually present. Secondly, the generosity shown to the guests, though outwardly most impressive, is restricted by the amount the guests can physically carry away. Though the food lying on the feasting platform looks inexhaustible to the observer, and the guests are capable of carrying away a heroic amount of food after a feast, the overall economic impact is minor. 527 527 574 628

Waddell remarks most interestingly that, in comparison with the main crops (taro, bananas and sugar-cane), a far higher proportion of dry season crops enter the exchange network. This applies especially to sago, breadfruit, sweet potatoes and yams. Waddell does not discuss nuts, but these are often given to friends and function as the small change of sociability. Both *tauga* and *puga* are stored for the season of shortage; betelnut is a traditional trade item. All vegetable produce is nowadays considered suitable for marketing. Villages near Popondetta have far more opportunity to sell or barter produce than the villages on the Mount Lamington foothills. 439 437 438

It is customary for animal food to enter the exchange network, either as a gift or as part of a festive meal to which guests are invited. Meat is ceremonial food, eaten for instance to mark the settlement of a quarrel. It is considered somewhat [261]

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improper to eat meat without introducing some element of gift exchange, very much like 'party food' in our own society.

In general, people take any wood they need from their own land. The only record I have of transactions involving wood concerns the obtaining of less common building materials for houses. My informants made a clear distinction between gifts of bush trees and gifts of sago. The former kind create no specific debt but whenever sago is taken a return gift is expected, because, I was told, sago is a cultivated plant.

With regard to feathers and *hambo*, attitudes differ as between areas where raw materials are plentiful and areas where they are rare. On the Mount Lamington foothills they seldom enter the exchange network – perhaps once a generarion, during a ceremony of uncommon importance. On the alluvial plains, they are a frequent trade item.[8] Of other items of traditional trade, betelnuts and lime are the most important. Betelnut grows only on the foothills; lime is made of shells collected on the seashore. It was, and is, therefore common to exchange one for the other, as betelnut can be chewed only together with lime and betelnut chewing is as popular a social activity among the Orokaiva as it is throughout New Guinea and Indonesia. A peppery plant called *hingi* (piper betel) is always chewed with the other two ingredients. This again grows best on the hills, so that it is often exchanged with the betelnuts. The alluvial plains are in a poor bargaining position with regard to the betelnut complex as they produce none of the ingredients from their own land. It may be partly for this reason that they are accustomed to accumulating animal products and to using these as objects of trade.

By far the largest number of exchanges take place within a village, only a minority of transactions occurring between members of different village

TABLE II/7

ACQUISITION OF 'HAMBO' AND 'DI'
(*Source*: Crocombe and Hogbin 1963: 51; Rimoldi 1966: 80)

	Sivepe		*Inonda*	
	Hambo	*Di*	*Hambo*	*Di*
Inheritance, cash value ($)	48.40	17.60	18.60	5.70
Percentage	53%	40%	17%	12%
Cash Purchase, value ($)	9.30	4.50	36.10	2.00
Percentage	10%	10%	33%	4%
Bride price or other exchanges, value ($)	17.70	6.50	48.30	17.90
Percentage	19%	14%	44%	38%
Made or caught, value ($)	16.60	15.40	5.90	21.10
Percentage	18%	35%	5%	45%
Total, value: ($)	92.00	44.00	108.90	46.70

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439 communities. When these do occur they are usually between neighbouring
437 communities, as Waddell and Krinks have clearly demonstrated.[9] Intertribal
438 trade, though small in volume, was politically important in that it provided a
motive for terminating, or at least interrupting, warlike disputes. Intertribal trade
[628] was mainly in animal products, betelnut ingredients, feathers, *hambo*, and certain artifacts which were known to be of high quality in particular districts, e.g. Binandere pots were exchanged for Yega loincloths; only mountain people could supply cassowary feathers, and so on. Such exchanges may, under modern conditions, take the form of gift exchange, barter or sale but it may be doubted whether barter was ever as clearly institutionalised and differentiated from gift exchange among the Orokaiva as is the case in many other parts of Melanesia.

433 *Money.* With a few reservations, one could describe the role of money in
436 the modern Orokaiva economy in much the same terms as Salisbury used for the Siane (1962). Salisbury distinguishes between three nexuses of activity. One is concerned with the production, distribution and consumption of subsistence goods, another with luxury goods and a third with ceremonial goods. The three nexuses involve not only categories of goods but also different types of social
436 groups. Among the Orokaiva as among the Siane, money mainly enters the
454 luxury and ceremonial nexuses. As with the Siane, the Orokaiva tend to store pound notes in treasure boxes, with *di* and *hambo*, and to keep them for special purposes which are often ceremonial (payment of brideprice, giving of feasts and
436 church donations), but sometimes utilitarian (payment of taxes). Purchases in
439 trade stores are mostly for luxury items, i.e. objects which the Orokaiva use only when there are guests to be entertained (tinned meat and fish, sugar, tea,
[262] batteries, cartridges, kerosene and tobacco, for example). Foods like rice, bread and flour are classifiable as luxuries among the hill people, as here they are used exclusively as guest foods. It is clear, however, from Waddell and Krinks' statistics that on the alluvial plains near Popondetta, rice and flour is bought in far greater quantity in months when taro is in short supply. These products are thus taking the place of subsidiary crops. People in this area prefer to make money from cash crops and services and to spend some of their cash on supplementary staples. The Siane, at the time of Salisbury's research, did not depend on cash as a source of staple food.

177 The use of money for capital goods merits some attention. Salisbury defines
436 capital as a stock of goods, present before a productive act is performed, used in production and 'immobilised' from direct consumption while the act is in
439 progress. Tools and implements are classed as 'durable instruments of produc-
511 tion.' Houses and clothing, etc., are called consumer's capital because they 'produce' services for their owners while they exist. It is interesting to compare, in respect of monetary input, everyday consumer goods and the types of capital just mentioned. While the former have generally remained outside the cash economy, it is precisely in the sphere of capital goods that the traditional industries have been largely or wholly replaced by cash-purchased innovations such as trade, store clothing, agricultural, hunting and cooking implements. Totally new items – radios, flashlights, wrist watches, pressure lamps, sewing machines and guitars have been added. Locked suitcases, for the storage of valuables, are very popular, indicating that safe storage used to be a vexing problem.

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Most of these capital goods enter the village by gift or gift exchange. Some types (e.g. kitchenware and clothes) may pass from one village to another by way of brideprice, but other types of gifts (e.g. radios) are hardly ever made in a ceremonial context, but only to close kinsmen. I am not at all sure whether, in Salisbury's terminology, the latter type should be classified as a luxury or a ceremonial item.

One conclusion emerging from the various studies made in the 1960s is that total village income has risen rapidly among the Orokaiva. The sources vary. it may be due to outside employment of persons still ordinarily resident in the village, to increased cash cropping, to sale of food surpluses or to increased remittances from local men employed away from the village.

4. *History*

The main object of this section is to provide some background for the study of Orokaiva exchange, especially between tribes and between Orokaiva and Europeans.

In physical constitution, Williams considered the Orokaiva to be 'midway between the typical Papuan and the typical Melanesian'. Dupeyrat, who has recently (1965) surveyed the evidence, considers the Orokaiva 'basically of the Papuan Mountain type', but mixed with Polyno-melanesian elements, late-comers in Papua, who spread to the Northern District via Maisina and Manigela. It is certainly true that one notices more Polyno-melanesian features along the coast (e.g. among the Yega) than inland.

In the period just prior to European occupation, the most notable aspect of Orokaiva history that can be reconstructed is pressure from the dense population on the Mount Lamington foothills upon the sparser populations surrounding the mountain on all sides, but especially to the north and east. These sparser populations (to whom Williams gives the common name Sauaha) pressed upon the still sparser populations dwelling in the still less fertile country on their own northern and eastern borders (see Chinnery and Beaver 1916; Williams 1930: 152–4; Monckton 1921: Ch. XXIV; Crocombe and Hogbin 1963: 14–16).

In 1888, in response to Australian pressure, the British government annexed Papua. The first administrator, Sir William McGregor, made many arduous exploratory expeditions while establishing his rule in this vast unknown territory. On one of these expeditions he ascended the Mambare river to its highest navigable point, a few miles above Tamata creek, where he discovered the existence of gold in the sand and shores of the river (Monckton 1921: 78; Murray 1912: 326–8). This was the first discovery of gold in Papua with important commercial prospects, and led to a major movement of prospectors and miners to the Northern District. Relationships with the Papuans were bad from the beginning, and there were numerous killings by both sides. In 1900 150 miners were working on the Yodda river; the Yodda and Gira goldfields together produced 15,000 oz. of gold (Murray 1912: 333). In order to stop the bloodshed, resident magistrates were stationed at Ioma, along the Mambare and at two places on the Kumusi river, which was for some years the access route to the Yodda field.

The early relationships between Orokaiva and Australians may be gleaned

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222 4 Orokaiva: *tavea*; botanical: *cycas media*; Orokaiva: *puga*; botanical: *terminalia okaria*. There are two varieties of breadfruit, called *oga* and *eumba*. They are both somewhat unusual but I failed, in spite of sending samples, to obtain indentifications.

241 5 Details of garden production are given in Table II/3. Rainfall at Sivepe and Inonda is shown in Rimoldi 1966:109; Crocombe and Hogbin 1963:100.

342 6 A plan of a contemporary Orokaiva house is shown in Fig. 3. Recent changes in house design, house construction and domestic amenities are summarised in Table II/4.

462 7 See Tables II/5 and II/6. Williams' data are taken from an unpublished manuscript and appeared first in Schwimmer 1969:226. I have discussed the Orokaiva division of labour in more detail in Schwimmer 1969: 145–50 and explained the apparent discrepancies between Williams' table and Waddell's and Krinks' statistics.

439 437 8 Crocombe and Hogbin (1963) provide a list of prices prevailing in this trade. They report that there is still some trade in shell ornaments from the coast and in feathers for head dresses from the mountains. Informants at Eroro, on the coast near Buna, gave me details of their traditional trade with Managalasi of the nearby mountains. A Sivepe man who has hunting rights to land near Ajoro goes there to hunt birds and sell the feathers. His chances of finding any of the more valuable birds near Sivepe are remote. The difference in Sivepe and Inonda patterns (i.e. the foothills and the alluvial plains) appears from the data in Table II/7. It will be seen that Sivepe stock is to a far greater extent inherited, whereas Inonda stock is to a far greater extent acquired through brideprice (value $13), barter (value $21.60) and other exchanges (value $18.70).

439 438 437 9 Dr. Waddell has provided a detailed statistical table of the geographical distribution of subsistence produce (Waddell and Krinks 1968:218). This table provides clear and detailed information on the geographical range of the Sivepe exchange network. A full descriptive account may be found in Schwimmer 1969: 41–69.

648 10 An interesting picture of this period of Orokaiva history is drawn in Beaver, 1916.

795 11 Full information on these cults will be found in Chinnery and Haddon (1917) and Williams (1928). If has escaped previous commentators that Bia, who started the taro cult, was employed for some years by Monckton, and participated in various penitive enterprises with an alacrity most pleasing to his master. He was described in Monckton's books in rather revealing detail (e.g. 1921: 185, 268, 269, 295, 308; 1922: 10, 13, 65, 136, 172, 214, 216). For the present relationship between the Orokaiva and the missions, see Schwimmer 1969; 123–33.

871 872 797 659 648 12 The general subject of Orokaiva economic development since 1951 is very fully covered in numerous bulletins published by the New Guinea Research Unit from 1963 to the present, and also in Schwimmer 1969. A general indication of the investments in socio-economic development is given by a table of public expenditure in the territory of Papua for the years ended 30 June 1961 to 1965 (Commonwealth of Australia: *Annual Report of the Territory of Papua for the period 1 July 1964 to 30 June 1965*, 179). The growing emphasis on educational services is perhaps the most notable aspect. Table II/8 indicates the pattern of school attendance. Table II/9 summarises the activities of the Higaturu Local Government Council; roads, water supplies and clinics are perhaps the projects most relevant to development.

101 13 The three villages have been sketched in figures 4, 5 and 6. Education and occupational experience at Sivepe and Hohorita are analysed in Tables II/10 and II/11.

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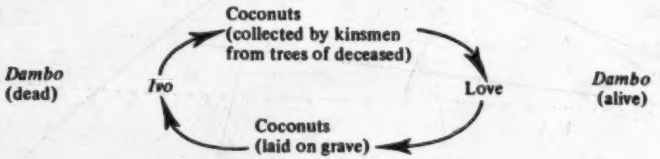
of coconut gifts, in a great variety of sometimes quite casual relationships, the most crucial communication occurs in the large-scale, highly structured mortuary feast where we may regard the archetypal exchange situation as occurring between brothers-in-law (*dambo*), one of whom is dead while the other is alive. The exchange cycle is as follows:

MODEL 28



4. Areca *as Object of Mediation*

Areca, a mildly narcotic fruit, is chewed with lime and pepper (*hingi*) when persons, often from different households, are sitting together to relax and talk. It is always offered when friendly visitors arrive from other villages. It is chewed by women as much as by men, though by Waddell's statistics men act more frequently as donors of *areca* in the exchange network (71 per cent of recorded cases). *Areca* is the only Sivepe food product of which, by Waddell's statistics, more than half the disposals are to other than village residents. Table VIII/1 summarises the number of transactions but does not show that Sivepe is an exporter of betelnut, while lime is imported. Much of this export is in barter but sales for money also occur.

When friends from the same village are sitting together betelnut is shared in much the same way as beer in our culture, i.e. people offer nuts to each other but expect to come out approximately even. At visits to another village, it is more common for the principal visitor to make a bulk donation. The hosts share out betelnut among their guests either by throwing a few nuts to each person or (on more formal occasions) by the principal host presenting the principal visitor with a large bunch, leaving the latter to share them out among his people. The visitors also hand a nut to anyone in the host group who has no nut to chew. The two principals will distribute some of the *areca* they have received to chosen persons within their own group.

Betelnut is treated as a valuable commodity. It is never given away in heaps like ordinary garden crops. Its value is undoubtedly associated with its narcotic properties. At social gatherings its main effect appears to be that it creates a relaxed and genial atmosphere, breaking down hostility otherwise likely to exist between groups. Its magical use is so widespread that its supposed effect is hard to determine from the evidence of medicines. Many medicines consist of *areca* chewed with some specific purpose, and as such it is applied in hunting magic, magic for drumming, and magic against a variety of diseases.

In ritual its role is often the same as coconut, e.g. at mortuary feasts. The exchange cycle shown in model 28 applies similarly to betelnut. Yet, just as its

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TABLE VIII/1

'ARECA' TRANSACTIONS: SIVEPE AND INONDA

The following figures group together transactions involving *areca* nuts and lime used for chewing with *areca*.

(*Source*: Waddell and Krinks, 1968: 180, 210, 218, 237, 265, 270, 272)

	Sivepe		*Inonda*	
	Acquired	*Disposed*	*Acquired*	*Disposed*
Total transactions (lbs.)	124	114	93	39
Distribution (%)				
within village	56%	44%	30%	57%
outside village	44%	56%	70%	43%
Non-monetary transactions (lbs.)	107	100	83?	38?
Monetary transactions (lbs.)	17	15	9.8	1.0
($)	3.70	3.00	2.06	0.20
Donors and recipients by sex: Men	52%	71%	42%	36%
Women	48%	29%	58%	64%

biochemical action differs from that of the coconut (narcotic rather than nutritive), so its symbolic significance in magic and ritual also differs. A girl carries a bunch of betelnut at the ceremony concluding her seclusion after first menstruation. She also has betelnut to offer to a man at lovers' meetings.

The only betelnut myth recorded by Williams (1928: 123) emphasises the nut's aphrodisiac associations. The betel palm had a liaison with a village woman. Every night it bent over her house to visit her; every morning, as the birds woke, it bent back to stand once more as an immobile palm but left around her house a litter of small flowers. When the intrigue was discovered, the jealous husband cut down the palm. The lover cried as he fell: 'Now I am a man no longer but a mere betel palm; take these nuts and eat them.' This myth resembles the one collected by myself in that the hero was a male, although the *areca* palm is classified by Orokaiva as a female plant. The explanation of this remarkable discrepancy will be one of the main tasks of the present chapter.

The symbolic significance of the betelnut is not, however, exhausted by its role as a catalyst in sexual love. One may call it, more properly, a catalyst in any kind of social exchange. As such, it helps to restore amity between former enemies. Its narcotic action raises the spirits of both opponents to the sphere of primal time when no strife existed. In sexual love, according to Orokaiva, feminine sexuality is dangerous, even lethal, to man in certain circumstances, a notion which is reflected in a number of avoidances woman must practice in order to avoid polluting and ritually killing a man. In courtship, the woman must take the initiative; the man is represented as slow and reluctant, precisely

743 The Public Health Department maintains a large base hospital at Saiho, 5 miles from Sivepe. A vegetable market at Saiho, 366 originally established to supply the hospital, now serves a wider range of customers and at present is open every Thursday and Saturday (E. Waddell: personal communication). A few Sivepe [432] people in our sample sell vegetables there regularly but seldom [438] buy anything except lime (for chewing with betel nut). There are well-stocked trade stores at Saiho and Awala and a Savings Bank agency at Awala. In 1963 a trade store was established near Sasembata, by a member of Kongahambo village.

177 We could not complete this introductory sketch of local 648 facilities and conditions without noting the traumatic experiences of the mountain Orokaiva during the life-span of the older men. Even an abbreviated description of local attitudes towards introduced economic and social changes such as we attempt later, would be inadequate unless it alluded to the likely deep impact of the following events.

First, the early government patrols, which encountered widespread opposition from the Orokaiva, were attacked most persistently by the 'Wasida' people who include the Sivepe villagers. Fighting was fierce and many of the old men we talked to had been close relatives killed or wounded.

Second, during World War II the paths of advance and retreat of Australian and Japanese troops crossed this area and the [121] Orokaiva were 'drawn in as helpers, willingly or unwillingly, on both sides of the lines'.[1] Some Orokaiva groups also became involved in intertribal skirmishes at this time - during our stay an imminent military exercise occasioned apprehensions among some Orokaiva about a possible resumption of dormant intertribal conflict at the time of the exercise.

Scattered for safety in the bush while the wartime campaigns swept the area, many people in the neighbourhood of Sivepe died of malnutrition. In addition, there was very thorough recruiting [101] of local men for subsequent phases of the war elsehwere in the Territory. In 1948 patrol staff reported that there was cause for concern in the continued decline in population.[2] At this

[1] Keesing 1951:8. For an account of this episode see McCarthy 1959: Ch. 4, 10 ff., see esp. pp.110, 126n and maps pp.123, 357.

[464] [2] The war was said to have been a contributing factor; moreover, many villagers were employed as labourers on local European plantations and returned only at weekends; more important, the percentage of able-bodied males absent elsewhere as indentured labour had reached 31 and the officer accordingly recommended in 1948 that the area including Isoge, Isivita and Awala villages be closed to recruiting.

regular working days. One man on vacation from regular paid employment worked both days with his wife in his subsistence garden but most relaxed in the village or visited kinsmen.

Table 4

Time patterns (6 weeks)
(Average hours per week)

	Men	Women	Both sexes
Traditional activities*			
Gardening	13.50	15.19	14.35
Hunting, fishing	1.29	1.19	1.24
Building	2.73	0.39	1.56
	17.53	16.77	17.15
Income-earning activities			
Paid work	2.60	-	1.30
Cash crops	0.79	0.31	0.55
	3.39	0.31	1.85
Non-economic activities**			
Sick	4.94	3.81	4.38
Travel	4.14	2.51	3.33
Religion	0.96	3.97	2.46
Council	0.41	1.44	0.92
	10.45	11.72	11.09
TOTAL	31.37	28.80	30.09

*Excluding domestic activities.

**For comparative purposes, we have recorded days taken up by non-productive activities, such as travel (including visiting and absence for reasons of other social obligations) as 7 hours, the standard used by Crocombe and Hogbin at Inonda (1963:62).

A tendency for men to regard the season as a time for renewing social contacts became more apparent in the week of the New Year. Although New Year's day was not specifically observed, the men who were well enough spent at least 1 day of the week visiting kin in other villages. Women too spent more time than usual away from the village but by New Year they were also resuming the routine of subsistence gardening. A general increase in movement between villages in the area appears to be usual at this time of the year. Several villagers used to visit Kokoda at the New Year to trade traditional valuables with members of other tribes.

433 so misguided, they have no reason to expect different results if they plant cocoa as advised by agricultural extension staff. A point of interest here is the fact that although various people volunteered this view on independent occasions, it has never been the policy of the District Agricultural Office to advocate cocoa planting in the Saiho (Sivepe) area, but neighbouring planters have also observed that this is the view expressed among neighbouring villagers.

[434] [438] [245] The areas of the gardens in which coffee was tried were too small to give satisfying returns.[1] The income of £11 earned by the sample by weeding, processing and marketing their coffee in 1962 compares unfavourably with the £13 received from the year's sales of betel nut which grows well in the area, requires no maintenance and finds a ready market at any time among travellers on the main road.

[435] It is said that enthusiasm for establishing coffee gardens was at a peak when the Administration paid 2 shillings per pound of parchment and has abated considerably since: a factor of central importance in the history of individual cash-cropping here and elsewhere among the Orokaiva is the fall of the price for parchment coffee - by more than 50 per cent since the Sivepe trees were planted.

The size of the decrease aside, it quickly became apparent to us that because the people have only a limited knowledge of the processing and marketing of coffee once the product has left their hands and no knowledge of the process of price fixation, fluctuations in price seem quite arbitrary. A general fall is seen as another instance of the inconsistent treatment they have come to expect as producers and their response is negative. The withdrawal of interest in extensive coffee production due to the uncertainty of rewards is reported to be common in most villages in this area. [245] However, while 725 people in the Saiho area experimented with coffee, only 19 people, in 8 villages, have as yet decided to plant cocoa.[2] Economists estimate that the price of each major type of cash crop currently in production in the area can be expected to fall by about another 30 per cent on the world market in the next 5 years.

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1 The average of 187 trees per grower in the Saiho Census Division (according to rough estimates available in 1963) is not significantly greater than the sample's 126 per grower at the time of our survey. The 1964 agriculture census, which contains much more reliable data, gives the Saiho average as 232 trees per grower and the present average for Sivepe as a whole as 220 trees per grower.

2 Figures from 1964 census, District Agricultural Office.

Chapter 2

Contact history and the development of cash cropping

121 The post-contact history of the Orokaiva and their experience with cash cropping are described at length to demonstrate the very limited interactions between the subsistence and advanced sectors of the economy. It is the particular character of these interactions which provides the framework for understanding contemporary Orokaiva involvement in commercial activities.

(a) Initial contact

177 The first recorded contact with Europeans was made in 1893 when the Governor of British New Guinea, Sir William MacGregor, and the Anglican missionary, Copland King, sailed along the coast as far as the Mambare River. It was, however, the opening of the Yodda valley goldfields in 1897 and the subsequent extension of government control by resident magistrates which brought the majority of the Orokaiva into the European orbit.

The first decade of contact was characterised by the extreme severity both of the resistance put up by the Orokaiva to miners travelling to the goldfields, and of the punitive expeditions conducted by the resident magistrates in retaliation for such attacks and for inter-tribal raids. Both Monckton and Murray refer to Orokaiva feelings of 'bitter hostility' (Murray 1912) and of their 'hating the government and their police' (Monckton, quoted in Walker 1909).

714 177 178 [491] [438] By 1907 the area was pacified, a road had been built from Buna to the Yodda goldfields and regular markets along it supplied carriers with food in exchange for tobacco, bottles and other new commodities. Shortly after, two cult movements appeared among the Orokaiva, one the Baigona movement, centring on magico-medical practices, the other a Taro cult, emphasising careful cultivation of taro and subsequent large feasts.[1] Worsley (1957:65-74) identified implicit anti-European elements in the latter and the beginnings of new organisational trends wherein cult leaders were

[1] For a full description of these cults see Williams 1928.

8: Waddell & Krinks E-4,5 (1964-1965) 1968 OJ23 Orokaiva OJ23

454 considerable interest was shown, more than $14,000 being subscribed by the Orokaiva in the first six months of operation. However, it appeared during 1964 that this company might experience the same pattern of high initial interest and subsequent disenchantment, accentuated by the failure to pay a dividend at the end of the first year of operation.

439 Cocoa is purchased by both DASF and the Popondetta Cocoa Fermentary Ltd, a company financed entirely by European capital. Plans were being made in 1964 for the ex-servicemen settlers, both indigenous and expatriate, to establish their own fermentary.

366 [438] Weekly markets at Popondetta and Saiho provide outlets for subsistence produce but turnover is small and it is doubtful whether they contribute significantly to many individual incomes.[1] The principal buyer at Saiho is the Public Health Department and at Popondetta, the urban indigenous wage labour force, but in both markets the volume of transactions between subsistence-oriented villagers (primarily involving lime, smoked fish, areca nuts and fresh meat) is increasing.

435 46 [433] The Administration and the Anglican mission buy fresh foods brought to their stations. Since purchase prices were fixed by the Administration at 2c and the mission at 1c per lb,[2] and only a limited quantity is required, there is little incentive for the villager to increase production.

[241] In spite of an increasing commitment to cash cropping, rates of planting and levels of production fluctuate with changing prices and difficulties in selling certain crops. The purchase price for coffee has ranged between 9c and 32c per lb over the period 1955-65 while that for latex has fallen from a peak of 55c per lb during the Korean War boom to 9c per lb in 1965. A Citrus Marketing Scheme elicited much local interest in 1956-57 when fruit was purchased at 5c per lb, but it collapsed with the unwillingness of retailers in Port Moresby to handle the produce.

241 [464] (f) Conclusions

In spite of long participation in cash cropping, Orokaiva involvement is not high. Everywhere commercial production remains subsidiary to subsistence, individual cash crop holdings are almost

[434] [437]

[1] Dakeyne 1965:109; Rimoldi 1966:8. Both show, however, that a few individuals earn worthwhile sums from marketing.

[2] Bartered at this rate in salt, tobacco, razor blades and kerosene.

Chapter 3

The village economy

433 [129] This chapter describes briefly the Orokaiva pattern of production and distribution, with particular reference to Sivepe and Inonda.[1] Traditionally the villager operated within quite narrowly circumscribed physical limits. Each community functioned largely as an independent subsistence unit, almost all the requirements of [251] life being produced through shifting agriculture and the subsidiary pursuits of fishing, hunting and foraging on its own land. Production was directed almost entirely to immediate and direct consumption, [438] none of the staple foodstuffs except yams lending themselves to storage; exchange was confined largely to kindred within the community or in closely neighbouring communities. Beyond this, minor and informal trade links had developed between some of the inland and coastal peoples, but the degree of inter-dependence established can be considered insignificant.

[436] The contemporary economy comprises both subsistence and monetary sectors, with the former dominating. Most money traffic is with the non-agricultural sector of the national economy and there is little movement of money between subsistence units.

244 (a) The subsistence sector

(i) Production. The pattern of subsistence production is, as yet, little modified by cash cropping, in spite of the latter being based on permanent tree crops which involve substantially different agricultural practices.

Gardens are made in secondary growth where the forest has regenerated over a fallow period of about ten years. Little primary forest survives among the Mt Lamington Orokaiva and, even where it [36] does, secondary growth is preferred for gardening as it is easier to clear. In addition to the shifts in garden locations, many [184] settlements also change sites at frequent intervals, the cycle appearing to be a little longer than the cultivation cycle. All

[1] More detailed descriptions are given in Crocombe and Hogbin 1963:7-13, Dakeyne 1965:54-92 and Rimoldi 1966:13-28.

433 [184] settlements have access to garden land, hunting and foraging areas and creeks but there are considerable variations in availability of these resources, and others such as fish and potting clay. These variations are expressed in the relative significance of the different elements in the work and exchange patterns of different communities.

592 Within the community, the household is the principal economic unit, aiming at self-sufficiency in terms of procuring food, shelter, clothing and production equipment.[1] Thus, gardens are the responsibility of individual households, and the work group for any activity, including clearing and harvesting, seldom exceeds its adult members. [438] Each household produces its own digging-sticks, spears, building materials, sleeping-mats, etc., but axes, bush knives, cooking utensils and clothing are usually obtained from trade stores. For most [476] phases of production co-operation between households is of little importance.

241 A household may maintain between one and five gardens, three being the mean. These average 0.3 acres in size and are generally between five and twenty-five minutes' walk from the village. In some areas, including Inonda and the Yega area, it has recently become popular to plant kitchen gardens adjacent to the houses, often containing manioc, sweet potato, cucurbits, pineapple and even taro. Banana, coconut, breadfruit and 'hingi' (betel pepper) trees are often planted at random around the periphery of the village and in the village square.

The process of garden preparation has been described in the articles cited above.[2] When all but the largest trees have been felled, most of the debris is burned and the remainder piled around the tree stumps. There is no preparation of the soil and crops are planted with the aid of a digging-stick. Gardens are weeded regularly in the early stages, but less frequently as they approach [417] maturity. In the less densely settled areas where wild pigs are [136] common, such as Inonda, most gardens need to be fenced; when separate households have contiguous gardens they usually fence them simultaneously and help each other in this more often than in any other garden task.

[262] The staple food plant of the Orokaiva is taro (Colocasia) and comparatively small areas are planted with the subsidiary root crops of sweet potato, yams, 'German' taro (Xanthosoma) and manioc. Interplanted with the ground crops are large herbs and trees, such as

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[1] Exceptions occur in the case of the elderly or infirm, who are often supported by an offspring's household, and so frequently live in a house adjacent to one or more of them (see Map 4).

[2] See p.23.

A,[See Category 102, p. 38--Analyst]

Other informal transactions involving specific reciprocal obligations include the exchange of labour services, gifts of animals killed during a hunting expedition and more or less casual transactions with non-residents.

Formal exchanges operate on a larger scale than the daily or casual transactions. Crocombe (1966:71-2) has listed the main Orokaiva traditional ceremonies ('pondo' or feasts) as marking initiation, marriages, deaths, enhancement of prestige, land transfers, the re-establishment of peace after a quarrel and the lifting of prohibitions between a man and his mother-in-law. The first and last of these have become very rare. In addition to the traditional ceremonies, parties may now be held to mark Christmas, Easter, the saint's day of the local church, the opening of a school or aid post, and birthdays.

A feast provides an opportunity for settling many obligations which may be quite irrelevant to the ostensible purpose and may not concern the person or group actually 'giving' the feast. It may involve one or several villages or descent groups. The feast foods are almost exclusively village-produced, although small amounts of storebought goods, particularly rice, tinned fish, bread, tea and sugar, are becoming more common. Some feasts, such as those marking the end of minor disputes between individuals, are essentially exchanges and in themselves take little time; others include much ceremonial and may last longer than twenty-four hours.[1]

Parties seldom involve reciprocal exchanges though at some large ones traditional obligations to other participants may be settled. Invitations are usually given on the basis of residence near the location of the party rather than of membership of a particular descent group. Most take place during the afternoon and evening and non-traditional dancing to guitar accompaniment may continue throughout the night. Generally, only the host's household is involved in much preparation for a private party but other men's wives will help prepare food, for which some return is expected. Often only a small number of those attending receive a share of food in the customary manner. Others may participate in the dancing at will, but, if they wish to eat or drink, must purchase food or alcohol. Behaviour at such parties is largely imitative of European practice, to the extent that at one wedding party observed the bride was presented with a quantity of old plates, dishes and cutlery by other villagers.

In addition to these exchanges with kinsmen, co-residents and neighbouring villagers, there have been long-established trade links between the inland and coastal people. This trade originally

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[1] In the past they sometimes lasted several days.

438 [437] consisted in the barter of shells, lime and wooden and clay pots from the coast in return for areca and feathers from inland. Clay pots, shells and feathers are now rarely traded and the coastal people hawk their produce, mainly smoked fish and lime, around the villages and at the markets for cash.

433 All the people's subsistence needs may be produced within the village or by kinsmen or friends in other, essentially similar, villages. The exchange system serves both as a form of group security, in that the aged or infirm or people with gardens temporarily out of production can rely on kinsmen or friends for support, and a means of exercising authority, through the manipulation of the flow of goods and services. Strictly speaking, however, there is no necessary dependence on the production or distribution decisions made by others. In the case of cash and storebought goods, the reverse applies. These originate outside the village economy and in most cases outside the country. Whereas, given the limits of time, resources and convention, a villager may produce as much of any garden or forest item as he desires, he cannot affect the quantities of cash or store goods available, or the rate (through wage and price levels) at which they may be obtained.

(b) The cash sector

434 [443] The main sources of cash for Orokaiva villagers are the sale of cultivated produce, the sale of labour and remittances from kin in employment elsewhere. Since 1959, an additional source has been the ownership and operation of small stores, but so far only about twenty-five men (including some indigenes from other districts) have turned to trading. The relative significance of each source varies greatly from household to household within a village and within the sub-district. All occur irregularly and are highly unpredictable in the level of returns.

241 (i) Cash cropping. The cash crops of coffee, cocoa, rubber and coconuts occur in either individually-owned or communal holdings, the former under one of a number of land tenure systems, including customary tenure, the Higaturu Land Registration Scheme and the Land (Tenure Conversion) Ordinance. Individual holdings tend to be small, frequently less than 0.5 acres in size and containing less [571] than 250 trees. The communal holdings are larger, often exceeding ten acres, but, in some cases, they are not worked because of disputes over rights to trees and land. In other cases, they are operated by individuals on a rota system. Plantings are rarely weeded or trees pruned. This applies particularly to the communal holdings, where individuals do not accept responsibility for maintenance. In the older rubber and coconut plantings many of the [433] trees are self-sown. As well as lacking maintenance, in most cases

8: Waddell & Krinks E-4,5 (1964-1965) 1968 OJ23 Orokaiva OJ23

245 Pods are opened under the trees and the wet beans sold to the Popondetta Cocoa Fermentary Ltd, whose buyers operate along all roads in the cocoa areas between the coast and the Kumusi River. Where it would be uneconomic for the company to buy cocoa, as among the Aiga north of the Kumusi, DASF is the buying agent. Cocoa trees produce throughout the year but sales fall off during the wet season.

249 Rubber is sold as coagulum to a local planter who provides spouts, buckets and tools for incising the bark. A halved coconut shell is commonly used for receiving the latex. Two or three hours after the tree has been tapped, the latex is transferred to wooden boxes, hollowed logs or buckets and allowed to coagulate naturally. Until the inception of the Ombisusu rubber smallholders' factory in mid-May 1964, village rubber production in the Saiho area was restricted to a radius of five miles around the only buying agency at Awala, due to the necessity of carrying the rubber on foot to the factory. Rubber trees produce throughout most of the year, although there is a 'wintering' period of three months from August to October.

245 Copra can be sun-dried but most producers build a drying shed either of local materials or of corrugated iron left after the second world war. A shed may belong to an individual or a group and the drying system also may be individual or co-operative. Several hundred nuts are needed to make copra production worthwhile.[1] The nuts are halved and the fleshy interiors placed on a rack above a low fire kept almost smoke-free by using dry wood or discarded shells. After about a week, the copra is dry enough to be bagged [435] and sold at one of the co-operative buying agencies at Killerton, Buna and Oro Bay on the coast. The price is determined by the Copra Marketing Board and varies slightly with quality.

438 [443] (ii) Marketing. In addition to the long-distance trading of subsistence produce by coastal people, the inland people are also beginning to trade meat (pig, wallaby, etc.), smoked fish, areca, lime and locally grown tobacco for cash with other villagers, either by hawking or in the markets held regularly at Popondetta and Saiho.[2] Vegetables also are sold in the markets. At Popondetta a considerable variety of fresh vegetables, fruits and meat is bought by both indigenous and expatriate residents. Most vegetables

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[433] [1] At Inonda there is an average of fifteen coconut trees per household producing an estimated 450 nuts per household per year. Assuming that a household uses one nut daily for cooking or drinking, this leaves less than 100 nuts per household for copra.

[2] See Dakeyne 1965:102-9, for a description of Popondetta market. Although sales of pigmeat in particular to villagers are increasing, the practice is deplored by the older people who have little or no cash in hand.

438 are supplied by villages within two or three miles of the township whereas the meat and fish may come from much further afield, since their weight/value ratios are much higher than for vegetables. One pound of pigmeat sells for 10c - the price of four taros averaging eight pounds weight. Prices in the markets are standardised and not dependent on supply or demand. Those who sell meat or fish can earn worthwhile sums, since a wallaby may fetch $4 but, in general, marketing is a significant source of income only for people from the less densely-settled areas or the coast where fish or wild game are plentiful.

464 (iii) Wage employment. Several categories of wage employment are available to villagers from time to time. The construction of new all-weather roads within the sub-district has recently increased the opportunities for temporary employment as unskilled labour.[1]

The Administration frequently makes contracts for the supply of timber or the erection of buildings from local materials and both Sivepe and Inonda profited by these during the survey period. The contract may be made with an individual, who pays the others from the proceeds, or a group.

There are some opportunities for casual employment on plantations, but most planters prefer to employ workers from outside the Orokaiva area because they are less likely to be simultaneously involved in subsistence tasks and traditional obligations. Moreover, such work is not popular with the Orokaiva, who prefer to work for relatives holding blocks under the ex-servicemen's settlement scheme at Sangara, Isavene or Girua. Individuals or whole families may stay with relatives or friends in this way, sometimes for several months. No formal agreement is entered into and the villagers may work only intermittently, in return for their keep and, at the end, a sum of money and additional payment in kind (tinned meat, rice, sugar, etc.). In some cases, however, regular payment is made at the official casual rate of $3 a week. Work of this kind is popular and during the survey there was almost always at least one person temporarily absent from Sivepe visiting or working for settlers. At Inonda, it was possible to work for settlers on the Girua blocks while resident in the village.

Anglican mission stations frequently employ school-leavers as 'medical orderlies' and 'nurses' in their clinics and hospitals. Standard IV or V education is required but the salary is normally only $1 a month and few adults are involved.

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[1] This applied to villages between Popondetta and Inonda when the road to Oro Bay was improved in 1963-64, and in 1964 work began on the realignment and improvement of the Popondetta-Kokoda road, which passes through Saiho census division within three miles of Sivepe.

461 Contracting and casual employment near the village are the most popular forms of paid work, since it is possible to maintain subsistence production and even cash crops at the same time.

(iv) Remittances. Remittances are closely related to the number of absentees. Few Orokaiva have been eligible for skilled work because of the limited educational opportunities available 166 until very recently.[1] Those in employment almost invariably see themselves as being only temporarily absent from their villages[2] and therefore feel the need to maintain kinship links and settle obligations. They normally return to their villages for leave and, if married, may leave their families in the village in the care of relatives, since few employers provide married accommodation.

431 Single remittances are frequently of the order of $10 in cash or comprise gifts of clothing, tobacco, transistor radios and similar storebought goods beyond the financial reach of most villagers. The recipients say that they would like to reciprocate with gifts of food, particularly taro, but are precluded from it by the problems of posting or air-freighting heavy and perishable goods.

443 (v) Other sources of income. Since Papuans became eligible to 434 hold licences to trade in 1959, several Orokaiva men have established trade stores. Their stocks are fairly limited and include [438] rice, tinned foods, sugar, tobacco and small household goods. Since 1963, most have obtained their supplies from Oro Ltd and many have shares in this company. A number of the stores have experienced operational difficulties on account of the pressures of kin for credit or special favours, but some of the Orokaiva owners in 1964 were operating at a profit. One such store was established in Inonda in 1963.

525 Gambling with cards is illegal but is nevertheless popular. Orokaiva villagers play among themselves for areca or matches, although they prefer to play for cash against plantation or road labourers and settlers. Villagers sometimes win large sums in this way.[3] A winner is usually expected to return some of his gains to

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[1] Dakeyne (1965:94), however, found a high proportion of skilled men amongst the Yega people, who have had the longest educational experience in the Northern District, with a school at Gona since 1910.

[762] [2] Only two of the absent Sivepe men had not sent presents home for several years. One committed suicide in 1964; the other stated categorically that he had no intention of returning to the village, but in fact did return on leave at the end of 1965.

[3] A Hohota man won $60 in one session with the Girua block settlers and Dakeyne (1966b:37) cites a case of a Yega man winning $86 from plantation labourers.

454 (d) Monetary and other assets

Table 4:12 shows that the monetary assets of the village in November 1964 amounted to $166.70, or $10.40 per adult resident. In contrast with Sivepe, most (67 per cent) was invested in savings bank accounts and almost all the rest was held in cash. Only two men owned shares although householder 23 intended to buy some if those of either Oro Ltd or OCGS proved their value.

Table 4:12

Inonda: monetary assets of households, November 1964
($)

Household no.	Cash	Savings bank	Shares OCGS	Shares Oro Ltd	Total
16	12.95	16.18	10.00	-	39.13
17	3.90	-	-	-	3.90
18	0.80	-	-	-	0.80
19	-	-	-	-	-
20	1.50	36.00	-	10.00	47.50
21	3.00	20.00	-	-	23.00
23	1.07	20.00	-	-	21.07
24	11.80	19.50	-	-	31.30
Total	35.02	111.68	10.00	10.00	166.70

438 [444] In October 1963, the head of household 23 established a trade store, deriving most of his supplies on credit from Oro Ltd's wholesale store in Popondetta. His stock included tinned foodstuffs, rice, biscuits, sugar, salt, tea, soft drinks, chewing gum, cigarettes, trade tobacco, laundry soap, matches, kerosene, torch batteries, clothing, razor blades and playing cards. In addition, he obtained some goods from Chinese-owned stores where the wholesale prices, particularly for rice, were considerably lower. Store customers included people from Inonda and neighbouring villages and passers-by on the main road. Business was best between February and April 1964 when construction gangs were improving this road. By July, most of the villagers had moved to the new site and a new, better-stocked store was opened about two and a half miles away, and sales of the Inonda store began to decline. When the store-owner moved to the new site, he did not begin rebuilding the store until late in December and kept only a few goods (biscuits, tobacco and kerosene) in his house.

511 177 (e) Other household property

Table 4:13 shows the inventories of household property acquired directly or indirectly from the cash sector of the economy, including

[TEXT CONTINUED ON PAGE 63]

8: Waddell & Krinks E-4,5 (1964-1965) 1968 OJ23 Orokaiva OJ23

511 the slightly wider range of property evident in Inonda. Sivepe has slightly higher monetary assets than Inonda ($18.96 and $18.52 per household) and a slightly higher percentage of cash in hand (26.9 per cent compared with 21 per cent).

438 178 The substitution of imported items for equipment and property traditionally produced within the village has eased many subsistence tasks such as clearing bush and gardening. Traditional cooking utensils, which took time to make and were easily broken, have been replaced by metal pots and dishes. Guns (and torches) have brought more reward for less effort in hunting, and fishing has become easier with goggles and elastic-propelled spears. Mosquito nets and bedding have made sleep more comfortable. Storebought goods and introduced plants have made possible a more varied diet, particularly during the dry season. The improvements have been on a small scale and have required the diversion of effort into non-traditional channels to obtain the necessary cash. With the exception of the trade store owner in Inonda, few people use cash to make large productive investments (discounting the substitution of steel for stone tools) in village-based activities.

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Table 10:1

Sivepe: major items of non-monetary exchange over the whole survey period

	Acquisition			Disposal		
	Total	%	Amount received from researchers*	Total	%	Amount disposed to researchers*
A. Subsistence produce	(lbs)		(lbs)	(lbs)		(lbs)
Taro	3,390	29	1	4,151	29	388
Sweet potato	1,136	9	-	1,942	13	543
Yam	870	8	-	1,423	10	193
Xanthosoma	350	3	-	104	1	8
'Soup'	169	1	4	228	2	43
Sugar-cane	155	1	-	161	1	30
Corn	100	1	-	211	1	90
Banana	1,096	9	-	827	6	111
Coconut	274	2	2	281	2	66
Pandanus fruit	156	1	-	140	1	5
Sago	536	5	-	744	5	19
Areca/pepper/lime	107	1	1	100	1	4
Breadfruit	948	8	-	1,497	10	80
Other cultivated produce	306	3	-	586	4	361
Pig (domestic and wild)	1,245	11	-	1,372	9	8
Cuscus	138	1	-	181	1	-
Other product of hunting or foraging	138	1	-	100	1	7
Other (firewood, etc.)	297	3	-	330	2	-
Total	11,451	97	15	14,458	99	1,956
B. Labour services	(hours)			(hours)		
Cash sector	128	12		143	13	
Subsistence sector	1,030	88		955	87	
Total	1,158	100		1,098	100	
C. Storebought goods	($)			($)		
Rice	15.08	8	1.30	5.42	22	0.12
Tinned fish	12.63	7	0.85	5.10	21	0.10
Tinned meat	2.95	2	-	0.06	-	0.02
Bread	1.19	1	-	0.10	-	-
Other foodstuffs	3.64	2	0.02	0.74	3	0.02
Alcoholic drinks	1.39	1	-	-	-	-
Trade tobacco	31.66	17	14.67	5.02	20	0.10
Cigarettes	1.49	1	-	0.06	-	-
Clothing	46.20	25	-	2.74	11	-
Radio/watch	30.00	16	-	-	-	-
Other personal goods	9.36	5	0.35	0.54	2	-
Household goods	6.12	3	3.38	2.34	8	-
Cartridges	9.40	5	0.60	2.00	8	-
Batteries, torches, bulbs	2.68	1	2.40	-	-	-
Other tools and equipment	4.99	3	-	0.75	3	-
Total	181.82	97	23.57	24.87	98	0.36

* Included in total.

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Table 10:2

Sivepe: major items of monetary exchange over the whole survey period

	Acquisition			Disposal		
	Total	$	% (value)	Total	$	% (value)
A. Subsistence produce	(lbs)			(lbs)		
Sweet potato	-	-	-	390	6.50	26
Taro	-	-	-	108	1.80	7
Yam	-	-	-	35	2.25	8
Areca/pepper/lime	17	3.70	32	15	3.00	12
Tobacco	-	-	-	2	0.70	3
Pig (domestic or wild)	66	5.65	49	70	8.15	33
Wild game (cuscus etc.)	14	1.50	13	13	2.30	8
Fish (smoked)	5	0.50	4	-	-	-
Eggs	0.3	0.20	2	-	-	-
Total	102.3	11.55	100	633	24.70	97
B. Labour services	(hours)			(hours)		
Cash sector	12	1.50	100	10	0.60	100
C. Cash crops				(lbs)		
Coffee (parchment)	-	-	-	324	58.30	81
Rubber (coagulum)	-	-	-	290	13.30	19
Total				614	71.60	100
D. Storebought goods						
Rice		17.22	13		-	-
Fish (tinned)		16.59	13		-	-
Meat (tinned)		8.25	6		-	-
Biscuits (sweet)		6.02	5		-	-
Bread		5.35	4		-	-
Sugar		3.30	3		-	-
Other foodstuffs		4.12	3		-	-
Alcoholic drinks		4.45	3		-	-
Tobacco - trade		4.54	3		-	-
Cigarettes		2.25	2		-	-
Clothing		10.10	8		0.40	100
Toiletries		3.14	2		-	-
Bedding		2.50	2		-	-
Other personal goods		3.60	3		-	-
Cooking utensils		8.20	6		-	-
Other household goods		6.18	5		-	-
Torches, batteries, bulbs		10.98	8		-	-
Cartridges		10.40	8		-	-
Other tools and equipment		3.70	3		-	-
Total		130.89	100		0.40	100

431 Clothing and tobacco, together with two specific gifts of a radio and a wrist watch, formed the bulk of goods received in this manner.

In the case of food a larger proportion is acquired from other subsistence villagers since some, particularly rice, circulates in a cooked form in the manner of taro and other garden produce, while tinned foods are frequently featured in more formal prestations.

Finally, the circulation of cartridges is directly connected with the rendering of hunting services and the provision of wild game.

432 (b) Monetary sector

438 (i) Subsistence produce. A small volume of subsistence produce is exchanged for cash but no such changes occur between kin apart from some pig which may be 'marketed' in the village and here accounts for 38 per cent by value of all transactions. Two categories can be identified according to the type of goods and circumstances of exchange. Sweet potatoes, taro and yams are sold by women to external agencies - the hospital administration at Saiho and the Anglican mission at Sasembata. These sales are largely unpremeditated and sporadic. The other goods, particularly areca, pepper, lime, pig, wild game and smoked fish are all scarce in some part of the sub-district and are normally transacted by the men, at Saiho market or with hawkers travelling through the village. Thus pig and other game always find a ready market because they do not constitute regular elements of the diet, while lime and fish are not available locally but are carried into the area by hawkers from the mouth of the Mambare and other coastal areas. Areca is plentiful around Sivepe and occasionally men carry bunches to Saiho to sell to people living at lower altitudes, along the Kumusi and towards Popondetta, where it is less common.

437 (ii) Labour services. Only two instances occurred of labour services being rendered in return for a cash payment, both in connection with cash crops. One involved assistance in marketing rubber and the second travelling to Avala to receive payment for coffee previously delivered.

[434] (iii) Cash crops. The cash crops, coffee and rubber, account for three-quarters of income derived from the sale of village products but only 26 per cent of the sample's total income (see Table 10:3). The marketing of both is the direct concern of the producer and there is little evidence of movement of the harvested product between members of the sample, either as payment for labour services rendered or due to one individual acting as middle-man between the producer and buyer.[1]

[1] But see p.203.

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

438 439 (iv) Storebought goods. Storebought goods account for 81 per cent of monetary acquisitions. Most originate from the external sector (trade stores) although alcoholic drinks together with a small quantity of food comprise purchases from other subsistence villagers at 'parties'. Only one instance of a disposal was recorded - a woman making a skirt at a mothers' union sewing class and selling it to another for the price of the materials.

Forty-six per cent of all purchases comprises foodstuffs and a further 9 per cent stimulants. Some of these can be considered luxuries in that they are largely superfluous to requirements. However, many dry season purchases, of rice in particular, are made specifically to supplement supplies from the subsistence sector.

The remaining 45 per cent of purchases consists of household and personal goods and equipment. Most of these are more basic to the economy: either their greater efficiency or durability has led to the elimination of traditional counterparts (as in the case of cooking utensils, axes and clothing), or they represent important technical innovations (as in the use of torches and guns for hunting).

434 (c) Cash

According to cash transactions effected during the survey, incomes amount to 40c per man-week or $21.02 per man-year, but 8.4 per cent of this amount originated from the researchers. If money from this source and bank transfers are excluded, a credit balance of $20.76 or a total income of $247.98 is recorded (see Table 10:3). Thus in a 'normal' year an adult's income would amount to $18.19 with a credit balance at the end of 74c, that is, he might save 4.1 per cent of his earnings. On account of the researcher's presence 16.9 per cent of earnings was saved in 1964. The majority enters, almost immediately, into circulation through either the gift exchange or the monetary system.

Table 10:3

Sivepe: acquisition and disposal of cash over the whole survey period
($)

	Acquisition	Disposal
Total	273.68	239.22
Including:		
Savings bank transfers	-	12.00
Transactions with researchers	25.70	-

434 Excluding the researchers' contribution to total income only 39 per cent is derived from the sale of cash crops and subsistence produce, the bulk entering instead through the gift exchange system, [431] largely in the form of remittances. By contrast, excluding bank deposits, 63 per cent of disposals takes place in the monetary system, principally as purchases of storebought goods, only a minority being distributed as gifts. In effect, therefore, the gift exchange system serves as the principal mechanism for the acquisition of cash, but only a minor part entering in this way is so distributed, income being used rather to purchase goods unavailable in the subsistence sector of the economy.

Seasonal variations in exchange patterns

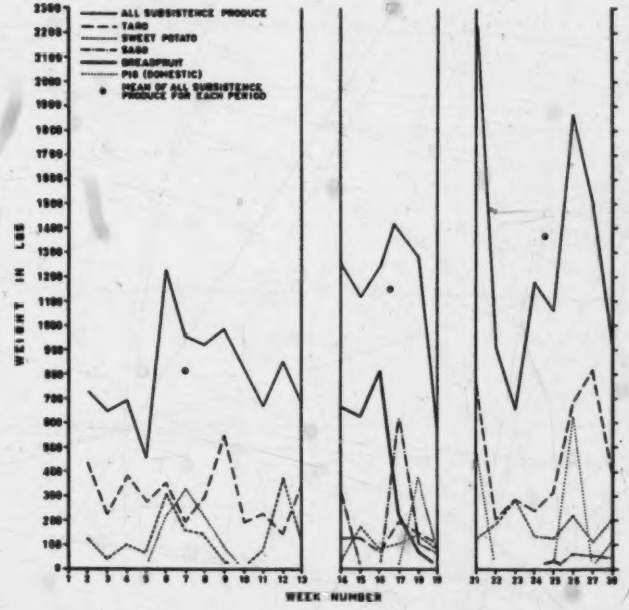
438 (i) Subsistence produce (see Table 10:4 and Fig.10:2). Although no net movements of subsistence produce in or out of the sample are identifiable, other than those directed to the researchers, transactions do reflect the temporal pattern of availability of particular goods. Three broad categories are identifiable - continuous, seasonal and periodic. Of the main cultivated plants only the circulation of sweet potato is maintained at a constant level throughout the year, as it is more tolerant of dry conditions than the staple, taro. However, in terms of diet, its role is not important and in only two weeks did it constitute the major item of exchange.

During periods I and III taro predominates in transactions comprising 37 per cent and 32 per cent respectively of the total volume, but with the annual fall in production in the dry season it declines to 11 per cent, and breadfruit and sago replace it as the main exchange items with 35 per cent and 17 per cent respectively. [262] The production and distribution of these latter crops is almost entirely restricted to the dry season when they constitute the major part of the diet. The peak in breadfruit exchanges precedes that of sago, this being a reflection of both food preference and labour productivity. Only after the supply of the former has been largely exhausted is the labour intensive work of sago extraction resorted to.

Among the Orokaiva, as elsewhere in New Guinea, meat, in particular pig, provides the classic example of goods only periodically available. Although most pigs are exchanged ritually prior to consumption, the fact that a specific quantity of meat may change hands several times, commonly by a process of subdivision and partial redistribution, precludes any meaningful estimation of the level of consumption. It is nevertheless worth noting that on twelve weeks no transactions were effected and on only six did the total volume exceed 100 lbs. On two of the latter six weeks pig was the major exchange item, on a third the volume was only marginally exceeded by that of taro, while on all three weeks it accounted for more than one-third of all transactions.

SIVEPE FIGURE 10-2 438

WEEKLY TRANSACTIONS OF SELECTED SUBSISTENCE PRODUCE



Note: Values below 25 lbs are not shown. Data were collected on only 4 days in week 2 but they have been adjusted to the equivalent of a full week through multiplying by the factor 7/4.

No entirely satisfactory explanation can be given for the increase in mean volume of transactions over the three survey periods. It does bear some relation, however, to the incidence of feasting. This is largely restricted to the wet season when there is an abundance of taro, yam and other garden foods. By the start of

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Table 10:4

Sivepe: mean weekly transactions of main subsistence produce during each recording period
(lbs)

Item		Period I	Period II	Period III
Taro	Acquisition	135.9	63.7	179.3
	Disposal	158.4	63.9	255.3
Sweet potato	A	41.4	41.6	50.9
	D	85.7	59.8	122.8
Pig (domestic)	A	31.8	42.2	77.6
	D	41.7	48.5	73.4
Breadfruit	A	0.5	156.7	3.8
	D	1.6	241.8	3.4
Yam	A	31.8	4.8	58.9
	D	54.0	17.3	91.2
Banana	A	35.6	46.8	50.5
	D	28.0	29.6	40.5
Sago	A	-	82.6	7.5
	D	-	107.5	12.6
Coconut	A	2.2	9.6	23.9
	D	4.8	7.4	22.7
Xanthosoma	A	8.4	25.8	12.3
	D	1.2	6.9	5.9
All subsistence produce (incl. those not shown)	A	342.2	496.2	621.7
	D	462.2	642.7	736.1

period I most feasting had been completed, while, apart from a 'party' to celebrate the return of a son on leave and a small feast following a church wedding, none occurred in the village during period II. Instead exchanges at this time were largely informal, the substantial increase being related to the scarcity of staple foods where a more equitable distribution of available supplies was effected. The orientation of effort on a group basis towards sago extraction, and its subsequent distribution, is evidence of this. Most ceremonial exchanges took place in period III after the taro gardens had returned to full production. Once the supply of food is abundant efforts are made to settle all obligations incurred during the preceding months, and the goods exchanged on such occasions considerably inflate the volume of transactions. A major food exchange or feast fell on each of the three weeks registering the greatest volume of transactions - 21, 26 and 27.

During week 21 one member of the sample conducted a formal exchange with his wife's brother to renew relations damaged earlier in an argument. The event, together with the preceding pig exchange

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

438 with another party and the peripheral food distributions, accounted for half the total volume of transactions effected by the sample during the week and, specifically, all the pig and 48 per cent of the taro. A mourning feast within the sample and food exchange between Sivepe and another village in weeks 26 and 27 had a similar impact on the level of transactions.

(ii) Labour services (Tables 10:5 and 10:6). Labour services are largely specific to certain activities not in themselves a regular feature of the agricultural routine, and transactions assume a distinctly seasonal pattern with the mean weekly volume in period II being approximately twice that of the other periods. This increase is entirely a function of sago-making, 56 per cent of all period II transactions being associated with it. The bulk of these transactions were in fact restricted to week 17 when services rendered amounted to 16 per cent of activity time.

Table 10:5

461 Sivepe: mean weekly transactions of labour services during each recording period (hours)

Labour services		Period I	Period II	Period III
Cash sector	Acquisition	11.4	1.3	-
	Disposal	12.3	1.9	-
Subsistence sector	A	26.6	77.1	32.6
	D	24.9	66.1	33.6
Total	A	37.9	78.4	32.6
	D	37.2	68.1	33.6

Within the subsistence sector labour services in harvesting yams, carrying food and pigs, and butchering the latter also follow a seasonal pattern.[1] Yams are harvested during the wet season for consumption during the dry, while the carrying of food and pigs is associated with the ceremonial exchanges and feasting which are a feature of period III. The decreasing significance of construction through the survey was related to the formulation of plans to transfer the village to a new site rather than to seasonal considerations.

[1] However, as noted on p.192, the circulation of pigmeat follows a periodic pattern on account of the killing of marauding pigs and the purchase of 'marketed' meat. Little assistance is required on such occasions.

454 worthwhile way in which they can invest their money or, three, a general inability of the people to handle their money effectively. An analysis of the pattern of expenditure on commodities (which account for 55 per cent of total expenditure) throws some light on the problem since, in this area, the people themselves initiate the act rather than any other institution.

511 Food and stimulants account for 62 per cent of the expenditure on commodities (see Table 10:12). In a predominately subsistence economy such purchases are generally considered to be of a luxury nature and superfluous to basic requirements. This view cannot be substantiated on the basis of the Sivepe evidence. Sixty-three per cent of rice purchases, the single most important item, are made during July, August and September - the latter part of the dry season - when there is a serious shortage of cultivated foods. The consumption of tinned meat and fish compensate, to some extent, for the inadequate protein content in the subsistence diet. Similarly, purchases of subsistence produce are restricted to the locally scarce resources of fish and meat, together with lime which is eaten with areca. Other foodstuffs include biscuits, bread, sugar and salt and only certain of these can be treated as purely luxury purchases. The other important commodities purchased are clothing and household goods (principally cooking utensils). Both are now essential elements in the material culture, having displaced their traditional counterparts.

438 In comparing the purchasing patterns of cash and non-cash croppers (and therefore of high and low income households) a clearer pattern 439 of priorities emerges. Among the latter clothing is the most im- 511 portant commodity purchased, followed by rice, meat and fish, and household goods. Together these account for 72 per cent of all purchases. The range of purchases of cash croppers is more widely distributed, the above commodities accounting for only 50 per cent of the total. Thirteen per cent of their expenditure is on goods used in hunting - cartridges, torches, batteries and bulbs - and it is in this activity particularly that their larger incomes are of direct significance in effecting a technological advance and increasing productivity. Their more substantial purchases of rice can be viewed in a similar light - reducing their need to make sago, so enabling them to continue their cash cropping activities through the dry season.

In general purchasing patterns can be readily understood in terms of the requirements of the village economy. Expenditure is largely restricted to goods which have displaced their traditional counterparts or which compensate for seasonal food shortages and there is little evidence of extravagance.

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Table 10:12

Sivere: household expenditure on commodities over 46.5 weeks

Household		Subsistence produce	Rice	Meat/fish (tinned)	Other foodstuffs	Stimulants	Clothing	Other personal goods	Household goods	Torches batteries, bulbs	Cartridges	Other tools and equipment	Total
1*	$	2.34	3.80	6.73	8.87	4.26	4.44	4.16	4.72	3.20	0.80	1.64	44.96
	%	5	8	15	20	9	10	9	10	7	2	4	99
2*	$	6.60	14.40	5.17	5.40	0.10	3.00	1.40	0.28	0.20	2.10	0.70	39.35
	%	17	37	13	14	-	8	4	1	1	5	2	102
3*	$	1.00	4.00	3.40	1.76	0.64	3.85	0.44	1.64	1.70	0.40	0.50	19.33
	%	5	21	18	9	3	20	2	8	9	2	3	100
4**	$	-	-	-	-	-	-	-	-	-	-	-	-
	%	-	-	-	-	-	-	-	-	-	-	-	-
5*	$	2.20	3.80	4.54	5.03	0.70	1.34	0.20	1.58	4.46	2.05	1.44	27.34
	%	8	14	17	18	3	5	1	6	16	7	5	100
6	$	0.20	0.40	0.20	-	-	-	0.20	-	-	0.10	1.00	2.10
	%	10	19	10	-	-	-	10	-	-	5	48	102
7***	$	0.20	-	0.20	-	-	-	-	-	-	-	-	0.40
	%	50	-	50	-	-	-	-	-	-	-	-	100
8	$	1.40	0.20	0.60	-	0.84	3.60	-	0.14	0.10	-	-	6.88
	%	20	3	9	-	12	52	-	2	1	-	-	99
9*	$	0.70	6.46	7.18	5.99	6.85	3.25	1.15	5.26	0.50	0.50	0.25	38.09
	%	2	17	19	16	18	9	3	14	1	1	1	101
10	$	-	1.00	1.40	0.20	-	-	-	3.20	-	-	-	5.80
	%	-	17	24	3	-	-	-	55	-	-	-	99
11	$	-	2.14	1.94	2.03	0.78	3.70	0.50	0.24	-	0.90	-	12.23
	%	-	17	16	17	6	30	4	2	-	7	-	99
12#	$	0.40	0.40	0.48	0.40	-	0.70	0.40	-	-	-	-	2.78
	%	14	14	17	14	-	25	14	-	-	-	-	98
13*	$	1.00	6.50	2.94	2.80	0.40	2.40	0.30	-	1.00	1.30	-	18.64
	%	5	35	16	15	2	13	2	-	5	7	-	100
14	$	0.40	1.50	4.28	2.30	0.40	1.70	0.50	4.05	0.40	-	-	15.53
	%	3	10	28	15	3	11	3	26	3	-	-	102
15*	$	1.10	1.90	2.10	2.14	1.54	1.50	3.10	1.24	2.50	7.10	-	24.22
	%	5	8	9	9	6	6	13	5	10	29	-	100
Total	$	17.54	46.50	41.16	36.92	16.51	29.48	12.35	22.35	14.06	15.25	5.53	257.65
	%	7	18	16	15	6	11	5	9	5	6	2	100
													($212.93)
Percentage: Cash croppers		7	19	15	15	7	9	5	7	6	7	2	99
Non-cash croppers		6	13	20	11	4	22	4	17	1	2	2	102 ($44.72)

* Cash cropping households. ** Surveyed for 6.5 weeks only. *** Surveyed for 27.5 weeks only. # Surveyed for 11.5 weeks only.

178 there are those indigenes who have moved temporarily or permanently
166 away from the village economy - to take up blocks of land as ex-servicemen settlers at Sangara or to find employment locally or in one of the main urban centres. With these people personal contact in economic relations persists.

166 Most of the resettlement blocks are less than five years old and still being developed. The settlers remain therefore partly
[434] subsistence-oriented and, with only a limited return from cash crops, their incomes are small. Among the Orokaiva contacts with kin are sustained since many live within a day's walk of their home
[465] villages. Most of those working within the District are employed on a casual basis for salaries of less than $4 per month from which, supplemented by rations, they derive all their sustenance, although plantation labourers frequently establish small gardens of their own. Again regular contact is maintained between them and their home village, or new links are forged, as between mission employees
[434] and neighbouring villagers. Most of the wage earners resident outside the District are permanent employees of the Administration with larger incomes than any members of the previous groups - two young men in Port Moresby were earning $9.35 and $8.27 each per week. For these people visits to the village are restricted to bi-annual leave but contact is maintained through correspondence and remitting gifts.

437 Table 10:15 details the movement of goods and services between the sample and the various groups. As might be expected, virtually all (96 per cent) of the subsistence produce acquired by the sample originates from villagers. Of produce disposed only 73 per cent is directed to villagers and over 3,000 lbs (21 per cent) go to organisations. In fact two-thirds of the latter was consumed by the researchers; however, a significant quantity is purchased by the external agencies. The movement of certain items assumes a rather
[438] different pattern in reflecting the needs and circumstances of the several groups. Virtually all the lime acquired is obtained through local wage earners or Saiho market, and all the fish through hawkers from the coast or, again, through the market. Similarly areca is widely distributed, 13 per cent of disposals going to local wage earners and 11 per cent to the market. While the circulation of such goods is insignificant in relation to the total volume of produce, the dispersal of kin over a wide area facilitates the movement of locally scarce resources. A small but comprehensive range of subsistence produce is disposed to local wage earners, reflecting the felt need among such people to supplement their restricted diet.

The exchange of labour services is, effectively, restricted to subsistence villagers, with physical separation and distinctive work patterns precluding any interaction with the other socio-economic categories. Although villagers do give considerable assistance to settlers on their blocks, this involves lengthy

[TEXT CONTINUED ON PAGE 215]

Table 10:13

Sivano: the circulation of goods and services by occupational category of partner
(percentages)

	Acquisition						Disposal					
	Total	1	2	3	4	5	Total	1	2	3	4	5
	(lbs)						(lbs)					
Subsistence produce	11,553	96	1	2	-	1	15,091	73	-	4	2	21
deviant items:												
Xanthosoma	350	94	-	6	-	-	104	92	-	1	-	7
Sweet potato	1,136	95	4	-	-	1	2,332	55	-	-	-	45
	(hrs)						(hrs)					
Labour services	1,170	99	1	-	-	-	1,108	99	-	1	-	-
	($)						($)					
Cash crops	-	-	-	-	-	-	71.60	-	-	-	-	100
Storebought goods	314.16	19	1	8	26	46	25.43	99	-	-	-	1
deviant items:												
Rice	32.30	16	1	6	1	76	5.42	97	-	-	-	3
Tinned fish	29.22	29	1	6	-	64	5.10	98	-	-	-	2
Tinned meat	11.20	-	4	15	3	78	0.06	67	-	-	-	33
Clothing	56.30	-	-	6	74	19	3.14	100	-	-	-	-
Bedding	9.20	-	16	-	57	27	-	-	-	-	-	-
Cartridges	19.80	39	-	1	-	61	2.00	100	-	-	-	-
Sacks	3.50	14	-	86	-	-	1.50	100	-	-	-	-
Watch/radio	30.00	-	-	33	67	-	-	-	-	-	-	-
Cash	273.72	13	-	7	34	46	239.20	20	-	-	-	80

1 = subsistence villagers; 2 = settlers; 3 = wage earners within District; 4 = wage earners outside District;
5 = organisations.

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437 absences from the village[1] and the services are normally reciprocated with goods originating in the external sector.

The exchange of cash crops (for cash) is wholly bilateral in form - between producer and buyer - with no other movement identifiable. This does not apply to storebought goods. While 46 per cent are obtained directly from trade stores and other organisations, significant quantities are also received from wage earners, as well as from other subsistence villagers. The bulk of goods obtained from organisations are foodstuffs and stimulants (59 per cent) and these may be consumed casually or redistributed, primarily in ceremonial exchanges. Wage earners outside the District are the second most important source of storebought goods; in this case the goods are largely non-perishable and of a comparatively high value as, for example, a radio, clothing, bedding and linen. Three parcels of gifts received were valued at $44, $35 and $19 each. Not only are such items suited for postal delivery but these are the only people that can really afford to make such gifts. Wage earners within the District are unable to make large gifts, both because of their lower incomes and the frequency of inter-visiting. Instead small quantities of food or used clothing are commonly given by them, although on one occasion a villager received a second-hand watch and on another, a number of sacks. The latter are highly valued for the storage of coffee.

438 439 The 19 per cent of storebought goods obtained from villagers fall into two categories - food which, as stated above, is mostly ceremonially exchanged,[2] and cartridges. Both the owners (or the operators) of shotguns received frequent requests to hunt on behalf of others, in return for the supply of cartridges. However, one of them also expected an additional payment of 10c per cartridge from some people for the service.[3]

437 With the exception of a few small gifts of prepared food made to the researchers, the acquired storebought goods are only given to other subsistence villagers. Essentially, therefore, the pattern of movement of these, as of subsistence produce, reflects the different resource bases of the various socio-economic categories where the diffusion of kin facilitates reciprocally based exchange or, in the absence of kin, monetary exchange. The opportunities for this latter type are enhanced by the introduction of non-kinsmen into the subsistence villagers' orbit, particularly as mission

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[1] See p.77.

[2] In one minor feast an individual received thirteen tins of fish and large pots of rice and tea, apart from the customary range of subsistence produce.

[3] See p.119.

437 employees. The need for these people to evolve some sort of exchange relationships with neighbouring villagers is explained by their low salaries and restricted subsistence resources. Their presence also facilitates long distance hawking, in that people from the coast will come to stay with relatives employed inland, bringing with them their fish and lime.

436 The main use of cash is as the medium of exchange with the external sector and most transactions are, therefore, with organisations, with 80 per cent of disposals to them. These cover not only purchases of goods but tax payments and mission contributions, which together account for 15 per cent of all disposals to organisations. Only a part of this expenditure is met by the sale of cash crops and subsistence produce and by village-based wage labour. If gifts from the researchers are disregarded, remittances from wage earners outside the District rank with earnings produced directly by the sample's endeavours (37 and 40 per cent respectively of total acquisitions), while a further 8 per cent of total income is derived [433] from wage earners within the District. In effect the external sector of the village economy is dependent to a very substantial extent on the earnings of those kinsmen in wage labour.

The geographical dimensions of exchange

439 As revealed in the preceding section, the entry of a number of kinsmen into the external sector of the economy and their scattering over a wide area considerably complicate the spatial dimensions of exchange by introducing something of a random element based upon the distribution of expatriate settlements and institutions rather than of indigenous population. Thus, three-quarters of all clothing originates from Port Moresby since that is where the highest income earners (among kin) are employed; the 34 per cent of cash income obtained from wage earners outside the District came from three separate points in the Central, Gulf and Western Highlands Districts where relatives are stationed; while the bulk of foodstuffs are purchased in a store at Awala - one hour's walk from the village - rather than another at Kongehambo - only 20 minutes away - because the former is better stocked.

437 With novel means of communication available, particularly the postal service, the circulation of non-perishable goods which are 438 not a product of the village economy is largely independent of factors of distance. Further, such circulation operates primarily outside the network of subsistence villagers, is restricted principally to the monetary system and is of a more strictly 'economic' nature. By contrast the exchange of subsistence produce and labour services takes place predominately at the village level, and here a more significant geographical (and sociological) dimension to exchanges can be identified.

437 Table 10:16 outlines the geographical pattern of transactions of
438 subsistence produce and labour services. In so far as produce is concerned, 96 per cent of all acquisitions and 89 per cent of disposals[1] are restricted to subsistence villages. Furthermore, almost all of these exchanges are effected within a radius of two miles of Sivepe, with the majority operating within the village itself. The small net outflow of produce away from the villages (of sales and gifts to relatives in paid employment) is more than compensated for by the dominant inflow of cash and storebought goods described above. Within this broad pattern specific variations are identifiable, from produce which is exchanged almost exclusively within Sivepe to that which figures largely in links with distant villages and points outside the village network. Within the former category are prepared dishes such as 'soup', foods eaten primarily as refreshments, such as sugar-cane, and those which dominate the diet during the dry season - sago and breadfruit. The latter category comprises the ecologically based transactions of areca, lime and fish. There is only a very limited demand for all three, however, and the volume and frequency of such exchanges is of little significance within the total pattern.

Taro and pig figure largely in inter-village exchanges, their movement being explicable primarily in cultural terms. One is the main source of carbohydrates, the other of protein and both serve as essential measures of wealth in food resources, therefore dominating ceremonial exchanges. In addition, custom dictates that a [231] person cannot kill and consume his own pig but must effect an ex- [262] change with another. Since it is unlikely that two households in the same village wish to kill pigs at the same time, the transactions are largely made between individuals in different villages.

The movements of yams and Xanthosoma are somewhat anomalous: almost all acquisitions of the former originate within Sivepe but many of the disposals are directed to other villages, while with Xanthosoma the pattern is reversed, most acquisitions coming from other villages. Neither crop is particularly abundant and the extent to which each is planted is largely a matter of individual preference, but both are favoured because of their storage qualities. Their variable movement must therefore be viewed as an expression of individual rather than broad cultural or ecological considerations.

437 Disregarding, for the moment, absences involving assistance to settlers at Sangara, the exchange of labour services is restricted, effectively, to the inter-village level and, almost entirely, to Sivepe itself. In the case of subsistence activities it is not

[1] If transactions with researchers are disregarded this figure becomes 86 per cent.

[TEXT CONTINUED ON PAGE 218]

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Table 10:16

Sivopo: the geographical distribution of subsistence produce and labour service transactions
(by place as a percentage of total distribution)

	Total (quantity)	Sivopo	Other villages within a radius of			Soamboata mission	Saiho market	Other expatriate centres	Total (%)
			<1 mile	1-2 miles	>2 miles				
	lbs								
I Acquisition									
Subsistence produce:	11,933	68	11	12	5	-	-	3	99
Selected items -									
Taro	3,390	60	10	14	9	-	-	6	99
Xanthosoma	350	20	25	50	2	2	-	4	101
Sweet potato	1,136	86	8	-	-	-	-	5	99
Yam	870	94	4	-	2	-	-	-	100
'Soup'	169	91	3	3	3	-	-	-	100
Sago	536	77	12	7	4	-	-	-	100
Breadfruit	940	98	1	-	1	-	-	-	100
Sugar cane	135	85	1	6	-	3	-	5	100
Areca, lime, etc.	124	57	10	2	17	-	10	6	102
Fish	5	-	-	-	80	-	20	-	100
Pig (domestic and wild)	1,311	44	16	38	1	-	-	-	99
	hrs								
Labour services:	1,170	90	3	1	5	-	-	1	100
Cash	140	100	-	-	-	-	-	-	100
Subsistence	1,030	88	3	2	6	-	-	1	100
	lbs								
II Disposal									
Subsistence produce:	15,091	66	9	6	8	5	4	3	101
Selected items -									
Taro	4,259	51	8	12	13	9	3	5	101
Xanthosoma	103	99	-	-	-	-	-	1	100
Sweet potato	2,332	72	2	2	2	5	17	-	100
Yam	1,459	74	5	1	13	-	1	5	99
'Soup'	226	86	4	-	7	-	-	3	100
Sago	746	81	5	2	5	2	1	4	100
Breadfruit	1,497	81	5	1	8	3	-	2	100
Sugar cane	181	84	6	1	4	4	-	1	100
Areca, lime, etc.	114	44	10	4	25	-	9	8	100
Pig (domestic and wild)	1,443	38	43	15	2	2	-	-	100
	hrs								
Labour services:	1,108								
Cash	153	96	-	4	-	-	-	-	100
Subsistence	955	75	12	7	5	1	-	-	100

Chapter 11

Exchange patterns: Inonda

437 [431]

The nature and volume of transactions

The Inonda people carry out exchanges of subsistence produce, labour services and items derived from trade stores not only with each other but also with people from other villages, with settlers and with kinsmen or friends who are wage earners. Reciprocation for a gift is not necessarily on the same occasion, or in the same quantity or of the same item. The exchanges effected by the 21 adult members of the village were recorded simultaneously with the data on activity patterns, a total of 2,782 man-days being covered.

(a) Non-monetary sector

438 [262]

(i) Subsistence produce. Table 11:1 shows the total amounts of each item given and received by the villagers in all non-monetary transactions. The dominant position of taro in the horticultural system and the diet is emphasised by its role in exchanges. The economic importance of the sparsely-populated grasslands and hill areas is also clear from the fact that wild pig is the next most important item after taro; other hunted produce and fish are also significant. Some allowance should be made for the fact that pig carcasses, weighing up to 200 lbs are often given whole rather than after the removal of the gut and bones.[1] In addition, portions of meat frequently pass through a 'chain' of exchanges and are thus counted several times. This process occurs more rarely for vegetable produce. These qualifications, however, are not sufficient to diminish the significance of pigmeat in the exchange pattern. Sweet potato is the second most important crop (see Table 4:9) and the third most important item in subsistence transactions. Banana, sugar-cane, yam and pumpkin are the main subsidiary crops and are also significant in the exchange pattern. The comparatively small

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[1] This practice is determined partly by the belief that in certain circumstances, such as when using a new gun, spear or new hunting dog, a hunter should not keep the prey to himself.

[TEXT CONTINUED ON PAGE 230

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

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Table 11:1

Inonda: major items of non-monetary exchange over the whole survey period

	Acquisition			Disposal		
	Total (lbs)	%	Amount* received from researchers (lbs)	Total (lbs)	%	Amount* given to researchers (lbs)
A. Subsistence produce						
Taro	5,494	39	15	6,307	46	271
Xanthosoma	353	3	-	141	1	2
Sweet potato	1,419	10	2	1,235	9	69
Yam	406	3	2	457	3	13
Pitpit	160	1	-	221	2	4
Banana	1,098	8	6	528	4	18
Pumpkin	521	4	-	410	3	18
'Soup'	261	2	-	266	2	9
Sago	263	2	4	135	1	1
Coconut	324	2	5	416	3	25
Sugar-cane	546	4	19	662	5	73
Other cultivated produce	833	6	4	631	5	31
Fish	165	1	-	172	1	9
Wallaby	313	2	-	241	2	2
Wild pig	1,461	11	-	1,836	13	2
Other produce of hunting, fishing and foraging	156	1	-	151	1	3
Other	160	1	-	48	-	-
Total	13,933	100	57	13,857	101	550
B. Services	Hours	%		Hours	%	
Labour, cash sector	52.8	8		53.1	12	
Labour, subsistence sector	578.4	92		386.8	88	
Total	631.2	100		439.9	100	
C. Store-bought goods	$	%	$	$	%	
Rice	35.34	20	0.86	12.94	31	
Tinned fish	13.12	8	0.40	6.16	15	
Tinned meat	11.02	6	1.58	1.30	3	
Bread	4.46	3	0.56	3.08	8	
Tea	1.84	1	0.26	1.14	3	
Sugar	4.90	3	0.30	1.62	4	
Flour	1.20	1	-	0.90	2	
Soft drinks	1.34	1	0.38	0.90	2	
Sweet biscuits	4.12	2	0.20	1.94	5	
Prepared refreshments	2.36	1	1.60	0.54	1	
Alcoholic drinks	8.38	5	2.44	-	-	
Trade tobacco	19.66	11	14.90	2.26	6	
Cigarettes	1.46	1	0.14	0.14	-	
Other foodstuffs	2.44	1	1.06	0.36	1	
Clothing	39.60	23	25.20**	6.70	16	
Other personal goods	9.42	5	8.18	0.24	1	
Household goods	8.62	5	5.94	0.04	-	
Tools and equipment	4.90	3	1.04	0.70	2	
Total	174.18	100	65.04	40.96	100	

* Included in total.
** Includes parcel of clothing valued at $21.54 from research worker in Australia.

438 proportion formed by pitpit is due to the fact that it was only in season during the first twelve weeks of the survey (see Table 11:4). Yams, Xanthosoma and sago are similarly seasonal and in certain weeks are more prominent than shown here. Of the other cultivated products, areca nuts are important although they amount to only 93 lbs acquired and 39 lbs disposed over the survey. One lb consists of approximately 24 areca nuts, so that about 86 nuts were acquired and 36 nuts disposed of by the village as a whole each week. In other words, there is a regular traffic in areca. Inonda people are dependent on outsiders for the nut because the palm does not grow well on their land.

It is noteworthy that the total acquisitions and disposals of subsistence items are very close to balancing - the excess of the former amounts to only 76 lbs out of a total of 14,000 lbs. However, the reservation should be made that the balance is achieved by equating all items on the basis of weight, and this does not exactly reflect Orokaiva methods of calculation. It is, nevertheless, probable that the outflow of the most favoured foods - taro (800 lbs) and pigmeat (375 lbs) - helps to balance the inflow of services and storebought goods and that this is an expression of the Orokaiva ideal of reciprocity in relationships.

437 [431] (ii) Labour services. The exchange of labour services is to some extent a matter of individual inclination. Where an obligation exists, it has not necessarily been incurred through an equivalent service, nor is reciprocation in this way essential - it may, instead, be through a gift of garden produce and obligations and reciprocations may be separated by a time-lag of a year. For this reason and others discussed below, the pattern of services over a period varies from individual to individual and acquisitions and disposals are not often in balance. In Table 11:1 the excess of acquisitions over disposals of labour services in the subsistence sector reflects large amounts of labour given by people from other villages, mostly young men staying for a few days or weeks with kin in Inonda. They contributed 42 per cent of subsistence services, in such tasks as house-building, sago-making and gardening. If it is assumed that people who are temporarily absent from Inonda follow the same work patterns as people temporarily resident, this apparent excess would be considerably reduced.

439 431 [123] (iii) Storebought goods. Table 11:1 also shows the values of goods derived from trade stores that are circulated through the gift exchange system. Thirty-seven per cent of the total value of acquisitions shown was in gifts from research workers. One-third of this was in the form of a parcel of clothing from a research worker in Australia and the rest was contributed during the survey. The most significant contributions were of trade tobacco, mosquito nets (shown as 'personal goods'), clothing and a suitcase given to the leading man for his journey to Port Moresby.

Discounting the effects of the researchers' presence, there is a considerable excess of acquisitions over disposals. This largely reflects the continued participation in the gift exchange system of villagers' kin who are in close contact with the monetary sector as wage earners or settlers (see Table 11:9).[1] The contributions of such people are particularly marked in the case of rice and clothing, which are, in terms of value, the most important items of storebought produce entering the gift exchange system. As well as rice, tinned fish, bread, trade tobacco and several lesser food items all enter into the exchange system occasionally. They are invariably given in small quantities, sometimes in the daily food transfers and sometimes as contributions to a feast or party.

(b) Monetary sector

Table 11:2 shows the total values of items acquired and disposed in exchanges involving an immediate return of cash. Purchases of subsistence produce are insignificant compared with the amounts acquired through gift exchange and they are usually made to fulfil an urgent need, such as feast contributions. Areca nuts, however, are bought occasionally. They are mostly obtained in the Popondetta market, whereas fish and game are purchased from hawkers. Some garden produce was sold to road construction workers early in the survey, but the main sales of subsistence produce were made in Popondetta market during periods II and III and comprised mostly fish and smoked meat from hunted animals. The Inonda people acquire almost four times as much cash from sales as they spend on purchases of subsistence produce.

In total, subsistence produce accounts for only a small proportion of monetary exchanges, which are concerned mainly with storebought goods. The total value of purchases of such goods is almost $200. As with gift exchange, clothing and rice are the most important items, with certain other foodstuffs - tinned fish, bread, sugar, biscuits and flour - also accounting for significant proportions. Apart from food and clothing, the main items purchased comprise household goods and tools and equipment for work.

Apart from goods sold through the medium of the trade store,[1] copra was the only non-traditional commodity sold during the 26 weeks of the recording periods. Some coffee was, however, sold in the weeks intervening between the three periods.[2]

The excess of acquisitions over disposals of storebought foods is evidence of the comparatively slight degree to which they enter into the gift exchange system, with the exception of rice and tinned

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[1] For details of the operation of the trade store, see p.255.

[2] See p.257.

A, [See Category 592, p.247--Analyst] B, [See Category 444, p.255--Analyst]

meat and fish. Between 4 and 6 lbs of rice are given out each week on average, mostly as plates of cooked rice.

Table 11:2

Inonda: major items of monetary exchange over the whole survey period

	Acquisition			Disposal		
	lbs	$	%	lbs	$	%
A. Subsistence produce						
Xanthosoma	50.0	0.70	9	-	-	-
Banana	-	-	-	25.0	2.10	7
Coconut	2.0	0.10	1	15.0	0.75	2
Areca	9.8	2.06	27	1.0	0.20	1
Tobacco	-	-	-	0.5	0.20	1
Fish	8.5	2.10	27	39.0	6.80	23
Crocodile	-	-	-	12.0	4.50	15
Bird	-	-	-	12.0	2.10	7
Bandicoot	1.0	0.10	1	3.5	0.90	3
Wallaby	5.0	0.30	4	35.0	3.50	12
Pig	21.0	2.40	31	87.5	8.30	28
Eggs	-	-	-	0.3	0.30	1
Total	97.3	7.76	100	230.8	29.65	100

B. Storebought goods	$	%	$	%
Rice	21.40	11		
Tinned fish	16.86	8		
Tinned meat	5.98	3		
Bread	13.04	7		
Sugar	12.94	7		
Flour	12.60	6		
Soft drinks	4.72	2		
Sweet biscuits	11.44	6		
Hard biscuits	2.20	1		
Prepared refreshments	8.10	4		
Other foodstuffs and medicines	5.72	3		
Cigarettes, tobacco, alcoholic drinks	4.00	2		
Clothing	37.44	19		
Other	12.16	6		
Household goods	13.40	7		
Tools and equipment	16.70	8		
Copra			2.32	100
Total	198.70	100	2.32	100

437 (c) Cash

Table 11:3 shows that the Inonda people disposed of slightly more cash than they received during the survey period, but when transactions with the researchers are excluded the figures are in almost exact balance. No attempt was made at the beginning of the survey to record cash-in-hand and savings, so no detailed balance sheet can be presented.

Table 11:3

Inonda: acquisition and disposal of cash over the whole survey period
($)

	Acquisition	Disposal
Total of cash	337.38	340.70
Including:		
Savings bank transfers	18.00	10.00
Transactions with researchers	6.60	9.94

432 Seasonal variations in the exchange patterns

In presenting the seasonal variations in exchange patterns (and in all subsequent analyses), transactions in the two systems of gift and monetary exchange have been amalgamated. The effect of this amalgamation is greater for non-traditional than for most subsistence products. Thus, the Inonda people purchased rice worth $21.40 during the survey. Of the $12.94 worth of rice which individuals disposed of in gifts, $8.94 went to other Inonda people (Table 11:24), and this forms only 16 per cent of total acquisitions of rice. For non-traditional items as a group, gifts received by the villagers from each other amount to only 7 per cent of the total value of acquisitions.

438 (i) Subsistence produce and storebought goods. Tables 11:4 and 11:5 show the seasonal variations in the exchange patterns by presenting the mean weekly amounts of various items acquired and disposed for each of the recording periods. The composition of the pattern may vary considerably from week to week during any season (see Figs.11:1 and 11:2). Thus, pigmeat formed 43 per cent (263 lbs) of acquisitions of subsistence items in week 4, but only 3 per cent (16 lbs) in week 6. Taro formed 32 per cent (191 lbs) and 65 per cent (349 lbs) respectively in the same weeks. However, the differences between the seasons as a whole have greater significance than intra-seasonal variations.

A,[i.e., Table 11:17; see Category 462, p. 285--Analyst]

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Table 11:4

Inonda: mean weekly transactions of main subsistence produce during each recording period
(lbs)

Item		Period I	Period II	Period III
Taro	Acquisition	324.7	168.4	186.1
	Disposal	394.8	122.5	240.1
Xanthosoma	A	4.2	14.8	34 6
	D	0.5	2.8	15.0
Sweet potato	A	22.0	109.2	69.4
	D	14.0	58.3	92.8
Yams	A	1.3	61.5	2.6
	D	1.5	72.0	0.4
Pitpit	A	15.3	-	0.9
	D	22.3	-	0.8
Banana	A	50.6	63.6	27.2
	D	16.8	33.2	18.6
Sago	A	0.8	18.9	17.9
	D	0.1	12.6	7.4
Coconut	A	7.8	18.5	17.8
	D	12.1	18.8	23.9
Sugar-cane	A	34.6	5.3	23.1
	D	39.2	6.0	32.6
Fish	A	11.9	3.5	5.9
	D	12.2	2.2	11.0
Pig (wild)	A	108.4	36.2	26.8
	D	150.8	40.2	31.3
All subsistence produce (incl. those not shown)	A	673.2	605.3	507.6
	D	730.1	470.0	558.3

The seasonal nature of taro production is underlined by the fact that in period II, the dry season, the mean amount disposed of per week is less than one-third of the amount in period I, when taro is in full production and much is circulated through feasts. During period III, taro planted during the dry season is just coming into production and the amount in circulation rises. In period II, there is a mean weekly excess of acquisitions over disposals of taro. Since disposals include those to other Inonda people (and, therefore, also recorded as acquisitions) the excess suggests an inflow from other villages. Several factors other than the comparatively low level of transactions support the idea that the main staple is in short supply during the dry season. Subsidiary foodstuffs, some of which are not necessarily seasonal in character, increase in significance at this time. Taro forms little over one-quarter of both

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Table 11:5

Inonda: mean weekly transactions of storebought goods during each recording period
($)

Item		Period I	Period II	Period III
Rice	Acquisition	2.56	2.39	1.89
	Disposal	0.62	0.39	0.61
Tinned fish/meat	A	2.00	1.48	2.09
	D	0.39	0.14	0.40
Bread	A	0.67	0.79	0.71
	D	0.16	0.12	0.08
Sugar	A	0.79	0.92	0.53
	D	0.17	-	0.04
Sweet biscuits	A	0.74	0.41	0.50
	D	0.17	-	0.05
Prepared 'snacks'	A	0.33	0.70	0.38
	D	-	0.03	0.03
Flour	A	0.04	2.24	-
	D	-	0.15	-
All storebought goods (incl. those not shown)	A	15.40	14.70	16.35
	D	1.67	1.82	2.99

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acquisitions and disposals of subsistence products, whereas sweet potato accounts for 18 per cent and yam 10 per cent of acquisitions, and the same crops account for 12 per cent and 15 per cent respectively of disposals. Of the crops that may be stored, yams are clearly a dry season crop in terms of exchange as well as of harvesting (see Table 7:3), but Xanthosoma and sago are significant later in the year also. The level of transactions of banana also increases in the dry season.

Although taro is still harvested during the dry season, there is a clear need to supplement it with other foodstuffs. This need is met in several ways: firstly, by production of sago, yams and manioc and by collection of green leaves and shoots. (These last substitute for pitpit, which is harvested only in the early part of the year.) Secondly, Table 11:4 suggests that Inonda receives net 'imports' of crops such as taro and sweet potato at this time from other villages. Thirdly, flour and rice are purchased, in addition to considerable quantities received as gifts from outside the village, and the net acquisitions by the villagers amount to an average of 20 lbs of each commodity per week. All the households purchased either rice or flour and all acquired some through gifts. The fall in acquisitions of taro per week from period I to period II is 70 lbs,

[437]

8: Waddell & Krinks E-4,5 (1964-1965) 1968 OJ23 Orokaiva OJ23

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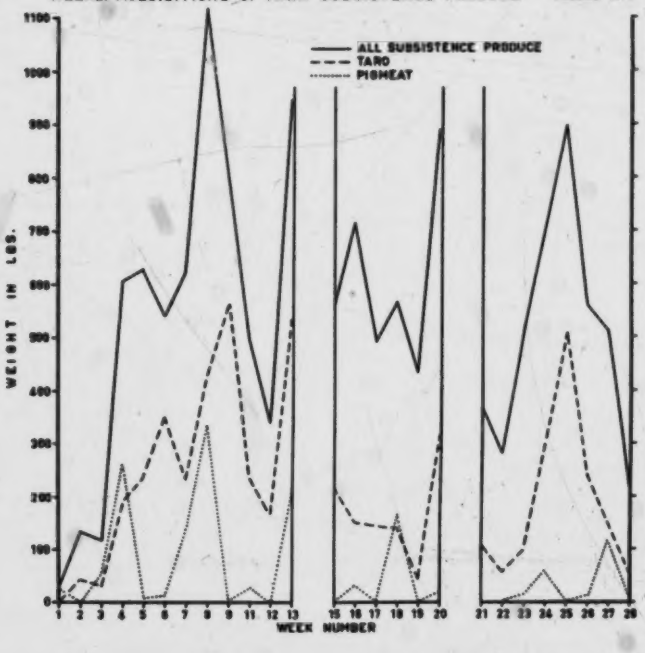
INONDA
WEEKLY ACQUISITIONS OF MAIN SUBSISTENCE PRODUCE FIGURE 11:1



representing some 28,000 calories.[1] This is slightly less than the calorific content of 20 lbs of flour. Flour is purchased only during the dry season, but purchases of rice are common throughout the year, particularly during the feasting season and, in the week when the major feast of the year was held, the Inonda people acquired a net 56 lbs of rice (19 lbs by purchase).

[1] See Platt 1945.

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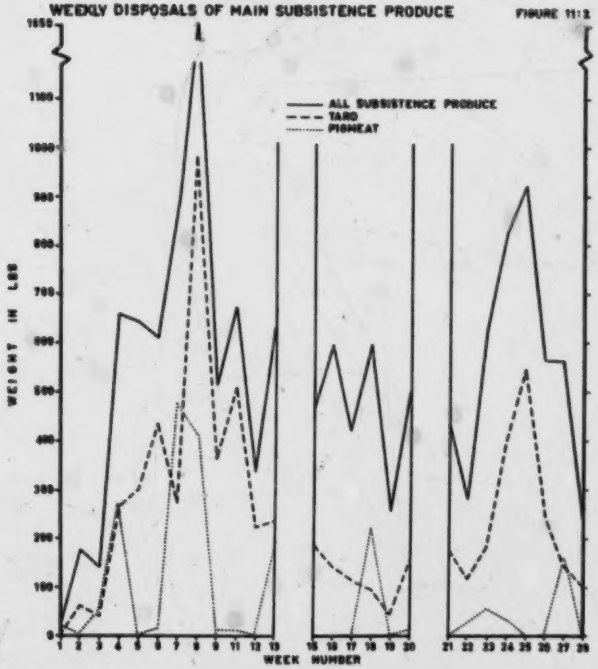
INONDA
WEEKLY DISPOSALS OF MAIN SUBSISTENCE PRODUCE FIGURE 11:2



The inflow of garden produce from other places during the dry season and of certain items, such as Xanthosoma and banana, throughout the year is balanced partly by an outflow of yams during the dry season but rather more by an outflow of a wider range of foods at other times, in particular taro, coconut, sugar-cane and pigmeat. In a sense, this is a form of specialisation and division of labour which is incorporated into the system of reciprocation. For example, there is a net inflow of banana from ex-servicemen settlers on the Girua blocks and a net outflow of pigmeat to settlers. This is essentially an amplification, on an annual scale, of the casual

438 daily exchanges of products between villagers when they have a temporary surplus, rather than a continuing specialisation. Al- [433] though some individuals do tend to concentrate more time than others on certain crops - as the widower in Inonda does with yams[1] - surpluses (and their counterpart, shortages) are frequently the [574] result as much of chance as of policy. Thus, near the end of the dry season a settler held a feast at short notice to mark the end [431] of a dispute with an Inonda man. The Inonda people decided not to make a return presentation at the same time since they had only sago available and would be humiliated if they offered this in return for the others' taro. In the event, contributions by people from the settlement blocks and other villages included more banana and sweet potato than taro.

The circulation operates at several different levels: the level of the village itself, that of a context which is more or less restricted to the occurrence of close kin and which, except perhaps for some affines, is only about three miles in radius, and finally the broader district level, which embraces greater environmental differences and is the sphere of operation of the comparatively [436] long-distance hawkers from both the coastal and mountain areas. At [178] this level, the volume of exchange is small; it is not necessarily based on kinship or even friendship ties and it is now almost entirely monetised.

437 (ii) Labour services. Labour assistance in the subsistence 221 sector shows a pronounced seasonality (see Table 11:6). This is largely due to the fact that 46 per cent of all the assistance received in the subsistence sector during the survey was in sago-making and all of this occurred during three weeks in the dry season.

Table 11:6

Inonda: mean weekly transactions of labour services during each recording period
(hours)

Labour services		Period I	Period II	Period III
Cash sector	Acquisition	1.9	4.0	1.5
	Disposal	2.5	1.6	2.6
Subsistence sector	A	8.3	67.6	10.5
	D	11.5	38.8	4.7
Total	A	10.2	71.6	12.0
	D	14.0	40.4	7.3

[1] Cf. pp.166-7. A
A, [See Category 512, pp. 166-167--Analyst]

437 operations in the cash sector are conducted, in part at least, according to traditional attitudes.

437 476 Table 11:16 gives details of labour assistance received from and given to non-residents. We have already referred to the low degree of collaboration in labour practised by the Inonda people and this table shows that 40 per cent of all the services received is from non-residents - mainly young people invited by specific Inonda households to assist either in specific short-term tasks such as house-construction and sago-making or in general tasks such as gardening and household chores. Little is contributed by people from nearby villages compared with that given by those from more distant ones who come to live in Inonda for several days or weeks. The young men who came to assist household 23 also helped household 16 in sago-making. Most of the labour assistance given by households 16 and 17 is to non-residents, primarily to kin at Ijika and on the Girua settlement block, and it included work on garden clearance, hunting and maintenance of coffee and cocoa trees. Almost half of that in activities relating to the cash sector is given to non-residents, but less than one-sixth of subsistence sector services goes to non-residents.

Assistance by non-residents in sago-making accounts for 41 per cent of all services received from them and it forms one-fifth of all the labour invested in the task. Non-residents also account for 6 per cent of the total labour input in construction of houses, but their contribution in other tasks is quantitatively insignificant although it may be of considerable value as, for instance, in establishing a garden quickly to benefit from favourable weather conditions. Thus, households which have suitable kinship connections and are in a position to provide hospitality may derive considerable benefit by inviting young kinsmen to stay with them. A further implication is that the presence of young men who are not tied by material requirements to their village of origin means that there is, to some extent, a flexible reserve of labour which can be drawn upon at short notice by people over a considerable area.

The exchange of goods and services by sex

438 462 562 The breakdown of the totals for the whole survey according to sex reveals that women are responsible for the bulk of the transactions of subsistence items. Since they do much of the harvesting[1] and practically all the cooking, this is to be expected. Where items are exchanged uncooked, the men's proportion of disposals at least, tends to be higher than otherwise; this is so, for instance, with bananas, coconut, sugar-cane and areca and it may reflect a

[1] See pp.148-9.

TEXT CONTINUED ON PAGE 265

8: Waddell & Krinks E-4,5 (1964-1965) 1968 OJ23 Orokaiva OJ23

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Table 11:17

Inoada: exchange of goods and services, by sex
(percentage distribution)

Category	Acquisition			Disposal		
	Men	Women	Total	Men	Women	Total
Subsistence produce:			(lbs)			(lbs)
Taro	40	60	5,494	6	94	6,307
Sweet potato	31	69	1,419	17	83	1,235
Yam	36	64	406	19	81	457
Banana	42	58	1,098	34	66	553
Pumpkin	21	79	521	16	84	410
'Soup'	70	30	261	3	97	266
Coconut	48	52	326	56	44	431
Sugar-cane	49	51	546	33	67	662
Areca	42	58	93	36	64	39
Other garden produce	44	56	1,566	26	74	1,089
Fish	49	51	174	71	29	211
Wallaby	81	19	318	85	15	276
Pig	77	23	1,482	85	15	1,923
Other produce of hunting, fishing and foraging	55	45	157	46	54	179
Other weight items	-	100	160	48	52	48
Labour services:			(hrs)			(hrs)
Cash	98	2	52.8	67	33	53.1
Subsistence	88	12	578.4	78	22	386.8
Storebought goods:			($)			($)
Rice	58	42	56.74	33	67	12.94
Tinned fish	67	33	29.98	54	46	6.16
Tinned meat	66	34	17.00	54	46	1.30
Bread	82	18	17.50	89	11	3.08
Sugar	75	25	17.84	100	-	1.62
Salt	48	52	1.24	-	100	0.12
Trade tobacco	71	29	21.24	45	55	2.26
Other foodstuffs and cigarettes	82	18	69.34	67	33	5.80
Clothing	60	40	77.84	55	45	6.70
Cooking utensils	21	79	9.70	-	-	-
Other storebought goods	88	12	42.60	14	86	0.78
Cash	88	12	337.36	90	10	340.70

	Men	Women	Total
Number of days surveyed	1,443	1,339	2,782
Percentage of total	52	48	100

438 462 greater sharing of refreshments by men when working or travelling together. Men are most prominent, however, in transactions of the produce of hunting and fishing, particularly wallaby, pig and fish. They engage in these activities more than women and a hunter will often give a whole pig or wallaby to a male relative, very rarely to a woman. The only instances recorded of gifts of carcasses to women were two young pigs caught in traps and a wallaby found dead (perhaps killed by a dog) on the roadway. As a rule, women are concerned in the distribution of meat only after an animal has been butchered. Women receive half the fish distributed, since young men returning from fishing expeditions almost invariably give part of the catch to close female relatives.

562 As men both earn and dispose of most of the money, it is to be expected that they acquire most of the storebought items - cooking utensils are the only significant exception, due to a single large purchase by one woman. Women are free to keep and dispose as they wish of cash acquired from gifts or in marketing (although they [439] acquire less than men in this way) and husbands also give their wives sums of money as presents or for specific purchases. Women account for a slightly larger share of disposals of some storebought goods, especially rice, reflecting the fact that in Inonda rice is becoming an accepted subsidiary food and may be included in the [556] routine daily exchanges of cooked food. This is true of flour also in the dry season. Rice is commonly prepared for visitors from other villages, perhaps to stress the wealth and 'modernity' of the Inonda people. As regards cash itself, most is handled by men.

437 462 562 Services are usually said to be given to household heads, so it is natural that most labour services are acquired by men. Those acquired expressly by women are largely in the form of garden and household tasks and house construction. Almost all the labour services relating to the cash sector are in cultivation of cash crops and, since women do not own commercial trees, are received by men, although the former do assist in their establishment and maintenance. In the subsistence sector, men own and control the exploitation of sago-palms and as sago-making accounts for 46 per cent of all assistance received in subsistence tasks, men are again dominant. They also provide most of the assistance in sago-making, and therefore account for the larger part of disposals of subsistence services.

The relationships between exchange and the socio-economic category of transacting partners

438 For each transaction, the name of the donor or recipient was recorded, together with his place of residence and occupational category - that is, whether he was a villager, a regular wage earner within the District, an ex-serviceman settler, or a wage earner resident outside the District. The categories are mutually

438 exclusive. Representatives of the external agencies were, for this purpose, grouped in a single category as 'organisations' (for example, the local government council, the army, the markets and trade stores). The term 'subsistence villager' includes those growing cash crops.

Table 11:18 shows how transactions of each category of goods and services are distributed among partners according to their occupational category. Items which deviate significantly (in most cases between 10 and 15 per cent) from the mean for their respective categories are shown separately.

As might be expected, the dominant position of villagers in exchanges of subsistence items is clear. For several items they account for 100 per cent of the total, although in the case of Xanthosoma only 34 per cent was acquired from this source. One household received several large gifts of the tuber from a New Guinea plantation labourer it had befriended, while some was also purchased at Popondetta market. Other noteworthy deviations include fish and game where significant quantities were sold at the market or given to settlers. In fact 34 per cent of the subsistence produce disposed to settlers comprised pigmeat, due, specifically, to a villager hunting on behalf of a relative on two occasions.

439 In contrast to the subsistence items, only a minority of non-traditional acquisitions is from villagers. Disposals of such items are smaller than acquisitions and only in a few cases - rice, tinned fish and clothing - is the total value above $6. Most disposals, particularly of food, are to other villagers. Most (over two-thirds) of the non-traditional items are acquired from trade stores (organisations). However, other people make significant contributions of some items: wage earners provide over half the alcoholic drinks, half the salt and considerable proportions of the rice, tinned fish and meat, and cigarettes, while the settlers are also a minor source of foodstuffs. The villagers clearly derive considerable benefit from the continued operation of the gift exchange system with these people, but most particularly with the wage earners who participate more fully in the monetary economy than settlers.

437 As regards labour services, almost all acquisitions are from subsistence villagers. Disposals in the subsistence sector naturally go largely to other villages although some help is given to settlers. In the cash sector, one-fifth of the labour services goes to settlers but none is received from them.

437 Most cash transactions are effected with organisations (52 per
434 cent of acquisitions and 77 per cent of disposals) but exchanges with other villagers are of secondary importance. Settlers and wage earners also play an important role as sources of cash. The largest item in transactions between villagers consisted of $36 paid out by the entrepreneur to the six men who worked for him on

[TEXT CONTINUED ON PAGE 268]

Table 11:18

Inonda: the circulation of goods and services by occupational category of partner
(percentages)

	Acquisition						Disposal					
	Total	1	2	3	4	5	Total	1	2	3	4	5
	(lbs)						(lbs)					
Subsistence produce	14,032	85	9	5	-	1	14,088	78	7	8	6	
deviant items:												
Xanthosoma	403	34	2	52	-	12	141	81	-	17	2	
Fish	174	94	2	4	-	-	211	69	2	6	23	
	(hrs)						(hrs)					
Labour services	631.2	98	-	2	-	-	439.9	93	6	1	-	
Cash sector	52.8	97	-	3	-	-	53.1	79	21	-	-	
Subsistence sector	578.4	98	-	2	-	-	386.8	95	4	1	-	
	($)						($)					
Storebought goods	373.04	9	3	17	-	71	43.48	80	4	3	12	
deviant items:												
Rice	56.74	15	7	39	-	39	12.94	82	6	1	11	
Tinned fish	29.98	17	5	20	-	58	6.16	86	3	1	10	
Tinned meat	17.00	17	5	34	-	44	1.38	100	-	-	-	
Bread	17.50	12	1	9	-	78	3.08	81	13	-	6	
Sugar	17.84	2	7	17	-	74	1.62	86	-	-	14	
Tobacco	21.24	4	5	6	-	85	2.24	87	4	9	-	
Flour	13.80	6	-	3	-	91	0.90	100	-	-	-	
Clothing	77.04	5	-	14	-	81	6.70	100	-	-	-	
Cartridges	7.22	10	8	3	-	79	0.50	100	-	-	-	
Cash	337.36	21	11	12	4	52	340.70	19	-	4	77	

1 = subsistence villagers; 2 = settlers; 3 = wage earners within Northern District; 4 = wage earners outside Northern District; 5 = organisations.

B: Waddell & Krinks E-4,5 (1964-1965) 1968 OJ23 Orokaiva OJ23

H51
H38
H29

437 the construction contract. Most of the rest was exchanged as gifts
434 or loans. Nine dollars was received from settlers as wages, the rest as gifts or loans. Most of the money received from wage earners was in the form of gifts from kin or friends, but a small amount was acquired early in the survey by the sale of coconuts and bananas to road-workers. Gambling winnings accounted for half the money received from settlers, and wages a further 25 per cent. A total of $12 was received by two people in remittances from a kinsman working in Madang. Acquisitions of cash from organisations are mostly in the form of payments by the Administration for goods and contracts, wages from the road-construction company and receipts from marketing, while disposals consist mostly of payments to trade stores and council tax.

432 In summary, it may be said that the bulk of exchanges of subsistence produce are with other villagers, except for sales of certain items at market and generally small exchanges with settlers retaining firm links with their village-based kin. Transactions of cash and storebought items are largely confined to organisations, other villagers and wage earners in the Popondetta sub-district. Labour services are almost wholly with other villagers, apart from a little assistance given to settlers.

438 The geographical dimensions of exchange (see Maps 2 and 5)[A]

437 (i) Subsistence produce. Tables 11:19-24 show the locations of partners (whether people or organisations) with whom Inonda people engaged in transactions during the survey. Most are villages, but they also include plantations, settlement blocks, mission stations and isolated trade stores. Tables 11:19 and 11:20 present the information for transactions of subsistence produce and reveal that almost two-thirds of acquisitions come from within the village itself and a further 25 per cent from people living within a radius of two miles. Seventy-one per cent of the disposals are to Inonda villagers and a further 18 per cent to people within two miles' radius. People or organisations (particularly the market) at a distance of five miles or more account for 11 per cent of both acquisitions and disposals. The distribution reflects primarily the closeness of contacts with kin, most of whom (apart from affines) live within two miles of the village at Ajoro (which moved its site during the survey and changed its name to Hahemo), Ijika, Mosou and the Girua settlement block. The relationship with the road construction workers' camp at Evundo followed the marriage of an Inonda girl to a New Guinean labourer. Links with places at a greater distance are also almost exclusively based on kinship. Several households have consanguineal ties with Sewa and Urio villages; two households in particular maintain close contacts with relatives in Ururu, Popondetta and Hohorita and another household with the wife's kin at Sangara plantation and in Kendata village

[TEXT CONTINUED ON PAGE 270]

A. [See Category 102, pp. 8, 52--Analyst]

8: Waddell & Krinks E-4,5 (1964-1965) 1968 0223 Orokaiva 0223

Table 11:19

Inconda: places of origin of main subsistence products acquired by the sample

Item	Taro	Sweet potato	Yam	Banana	Pumpkin	Sago	Coconut	Sugar-cane	Corn	Areca	Fish	Wallaby	Pig	Total subsistence produce*	
Village	Percentage**													lbs	%
Inconda	61	58	91	51	49	47	67	70	79	30	61	53	82	8,676	62
Baheno and Ajoro	3	1	3	2	-	4	4	2	3	14	8	-	3	472	3
Ijika	9	11	1	8	7	6	4	11	13	3	7	-	2	1,068	8
Girua block	9	10	1	17	19	5	8	10	2	4	2	8	9	1,281	9
Moseu	5	-	-	5	-	17	3	-	-	3	9	19	1	505	4
Sewa	4	-	-	2	-	-	2	5	-	15	8	2	-	422	3
Girua plantation	-	-	-	-	-	-	-	-	-	-	-	-	-	157***	1
Jonita	2	-	-	3	14	-	-	-	-	-	1	-	-	256	2
Urio	-	20	-	5	1	21	1	-	-	1	3	2	3	517	4
All other places#	3	-	4	7	10	1	11	3	3	31	2	17	-	679	5
	98	100	100	100	100	101	100	101	100	101	101	101	100	14,033	101
Total in lbs	5,494	1,419	406	1,098	521	263	324	546	145	93	174	318	1,482		

* Including items not shown.
** Columns may not add to 100 due to rounding.
*** Xanthosoma only.
# Twenty-two in all.

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Table 11:20

Income: destinations of main subsistence products disposed by the sample

Item	Taro	Sweet potato	Yam	Banana	Pumpkin	Sago	Coconut	Sugar-cane	Corn	Areca	Fish	Wallaby	Pig	Total subsistence produce*	
Village	Percentage**													lbs	%
Inonda	70	72	85	75	74	86	56	69	81	74	58	67	67	9,960	71
Hahoue and Ajoro	4	5	2	1	6	7	3	2	1	3	1	20	-	470	3
Ijika	5	4	1	4	-	1	6	3	-	3	8	-	8	623	4
Sangara	1	2	-	3	-	-	-	-	-	-	1	-	-	110	1
Girua block	7	4	3	7	4	-	11	5	4	10	3	-	17	990	7
Hosou	2	2	1	2	4	-	1	5	-	2	5	-	1	274	2
Sous	1	1	1	-	-	3	2	1	-	1	-	-	-	131	1
Evundo	2	-	-	3	-	-	3	3	-	-	1	-	-	234	2
Urio	1	-	-	-	-	-	3	-	-	-	1	-	-	108	1
Popondetta	1	4	5	-	-	2	3	2	11	2	20	13	4	406	3
Ururo	3	1	1	1	10	1	1	1	1	-	1	-	-	386	3
All other places***	1	5	1	-	3	-	3	9	1	6	2	-	3	398	3
	100	100	100	98	101	100	98	100	99	101	101	100	100	14,090	101
Total in lbs	6,307	1,235	457	553	410	135	430	662	145	39	211	276	1,923		

* Including items not shown. ** Columns do not necessarily add to 100 due to rounding. *** Eighteen in all.

438
439

437 on the western slopes of Mt Lamington some 13 miles away (but 40 miles by road). As will be seen by comparing Tables 11:20 and 11:22, links between Inonda villagers and kin who are in wage employment in Ururu, Popondetta or on plantations are characterised by an outflow of garden produce from Inonda and an inflow of store-bought foods, clothing and cash. Many of the disposals to people from places more than two miles distant take place in Inonda - a string bag of vegetables weighing 35 lbs or more is rarely carried for any great distance and this in itself ensures a comparatively low volume of transactions of vegetable produce over distances greater than three or four miles. One of the main items of long-distance exchange is areca, which Inonda people receive mostly from villages such as Sewa and Kendata higher on the slopes of Mt Lamington.

438 439

In general, about half the subsistence transactions with people in the above places is of taro, with sweet potato, banana, sugar-cane and pigmeat also prominent. The bulk of acquisitions from kin in Urio, however, was of sweet potato, which had been planted as a 'catch crop' on land cleared for cocoa trees. The Xanthosoma bought at the market formed two-thirds of the acquisitions from Popondetta and fish and game formed almost half of the disposals, these going almost entirely to the market. Half of the acquisitions from Ururu (the mission station at Popondetta) were bananas - presumably such a crop is most easily grown by mission staff with little time (and land) at their disposal.

437 (ii) Labour services. The Inonda people receive over half of all labour services from their co-residents while most of the others came from only three other places: Sewa, where the entrepreneur's mother's sister's sons live; Ijika, where there is a branch of one of the component lineages of the Andiriha clan; and Kendata, the home village of the wife of one Inonda man (see Table 11:21). In the case of Sewa and Kendata, young people came to stay with and assist their Inonda kin for periods of a few weeks; the Sewa men assisted particularly in sago-making and construction, but also in some tasks related to the cash sector. Disposals of labour services are mainly to Inonda people but a considerable amount of assistance in cash sector tasks goes to kin in Ijika and to settlers on the Girua block. It should be noted that, although no labour assistance is received from settlers, Inonda people receive more commodities, both traditional and non-traditional, from the settlers than they give to them.

439 366 (iii) Storebought goods. The distribution of transacting partners for non-traditional goods differs greatly from that for garden and forest produce (see Table 11:22 and 11:23). The principal factor involved is the presence of trade stores as the main source of such goods. Thus, Popondetta, with several stores and within reasonably easy travelling distance, provides 40 per cent of Inonda people's total acquisitions of non-traditional goods,

service. In Sivepe sustained reciprocal exchanges operate primarily among members of an extended family and secondarily within a single generation (as between cross-cousins or ego and his wife's brother). In the first a significant degree of economic inter-dependence is apparent, while in the second exchanges serve to support alliances which may be both social and economic in character. Because of the continuing nature of the relationship no final settlement occurs and reciprocation is, therefore, frequently delayed. Elsewhere major exchanges are more typically characterised by immediate reciprocation, particularly where the obligation is a specific one relating to particular goods or service. In consequence only the casual exchanges, which themselves comprise but a small proportion of the total quantity of goods and services transacted, can be judged a drain on resources in the sense that they might serve to inhibit individual aggrandisement.[1] Furthermore, in most instances, the proportion of total production exchanged is so slight that the system cannot be considered to function as a major limitation on productivity. Even where the proportion is high, as with pigs or sago, there is normally immediate reciprocation to an equivalent, and often negotiated, value. In effect, therefore, it is less the goods than the relationship which determines the type of exchange adopted and according to the available evidence, this applies regardless of the extent of individual involvement in the monetary economy.

With the exception of labour services the mean volume of transactions per man-week in all categories in Inonda is about twice the level of that in Sivepe (see Table 12:1). However, the area over which most of them operate is much the same; at Inonda, 87 per cent of the acquisitions and 89 per cent of the disposals of subsistence produce are effected within a radius of two miles of the village, compared with 91 per cent and 81 per cent respectively at Sivepe. This difference of scale is largely explicable in terms of the greater socio-economic diversity of the Inonda neighbourhood and, related to this, the fact that virtually all the village's cash income is locally derived whereas at Sivepe a major source is remittances from kin, with whom there is little direct contact.

At Inonda a more restricted range of subsistence produce is available; with the exception of sago, there is a scarcity of staple foods suitable for consumption during the dry season. At the same time there is an abundance of fish and game within the group territory. Within a short distance of the village live ex-servicemen settlers (some of whom are kinsmen) and plantation labourers, while access to the wage earners in Popondetta is facilitated through the market there. The limited number of Inonda people in the permanent

[1] See pp.181-2.

[TEXT CONTINUED ON PAGE 281]

Table 12:1

Sivepe and Inonda: the volume of transactions per man-week compared

Item	Acquired		Disposed	
	Total	Mean (per man-week)	Total	Mean (per man-week)
Sivepe				
Subsistence produce (lbs)	11,553.00	17.10	15,091.00	22.30
Cash crops ($)	-	-	71.60	0.11
Labour services (hrs)	1,170.00	1.70	1,108.00	1.60
Storebought goods ($)	314.16	0.46	25.43	0.04
Cash ($)	273.72	0.40	239.20	0.35
Inonda				
Subsistence produce (lbs)	14,032.00	35.30	14,088.00	35.40
Cash crops ($)	-	-	2.32	0.01
Labour services (hrs)	631.20	1.60	439.90	1.10
Storebought goods ($)	373.04	0.94	41.08	0.10
Cash ($)	337.36	0.85	340.70	0.86

Total man-weeks: Sivepe - 677.3
Inonda - 397.4

wage-labour force may be related to this local diversity, and the fact that it is readily exploited through the medium of exchange, both monetary and non-monetary. Compared with their Sivepe counterparts, the Inonda people dispose of twice the volume of subsistence produce through the monetary sector, with sales of fish and game in Popondetta predominating. With settlers a wide range of subsistence produce is exchanged, labour services are rendered and cash payments received, while wage earners, whose involvement in the cash economy is greater than that of the settlers, serve as important sources of storebought goods and cash, which may be reciprocated with subsistence produce.

At Sivepe there appears to be less incentive to develop exchange relationships outside the village context. Apart from lime and fish there is little subsistence produce not readily available locally. The demand for produce at Saiho market is limited, while the prices obtained discourage regular selling. The few wage earners residing in the neighbourhood have small incomes and invariably maintain their own gardens. Consequently they control few goods not directly available to the villagers themselves from their own resources.

Table 2

245 242 423 162 464 Ages of blockholders in the Yega Scheme compared to other Yega men of working age

Age grouping	Men with cocoa block		Men without cocoa block		Men working away from villages	
	No	%	No	%	No	%
Under 30	7	15	13	20	53	62
Over 30 and under 40	16	35	17	26	23	27
Over 40 and under 50	17	37	17	26	6	7
Over 50	6	13	18	28	3	4
Total	46	100	65	100	85	100

Note. Ages are in most cases estimates and for the last category estimates by informants.

Table 2 indicates that, of the 46 cocoa blocks in the Yega Scheme, 33 (or 72 per cent) were held by men aged 30 to 50, slightly more than half of whom were over 40. Only 28 per cent of the persons allocated blocks were either under 30 or over 50 but nearly half the persons not allocated blocks were in these groups. The larger number of old men without blocks is understandable. They had few needs other than food and betel nut and the cost of small luxuries like sugar and rice could usually be provided by their sons. On the other hand, there was a very strong desire to obtain cocoa blocks on the part of middle-aged men who did not yet have them. There were few men aged 40 years or over working away from the village, though most of them had been away during their youth. The table emphasizes the distinct preference of young Yega men to work for wages away from home rather than to remain in the village: 89 per cent of the men working away from the village were under 40. Other data showed that 79 per cent of all bachelors over 16 years of age were working away from home or had recently returned from wage employment.

434 In addition to their earnings from cocoa production, Yega villagers had four sources of income.

[439] [444] i. Exchanging surplus agricultural produce with the mission, which gave tobacco, razor blades, needles, fish hooks, salt, etc. in exchange to the value of one penny per pound weight of produce. This mission barter enabled the Yega to obtain small useful items with no loss of time, for even though prices at the Popondetta market were about three times higher, to get there required about half a day's walk in each direction carrying the produce.

434 438 ii. The marketing of agricultural and marine products and handicrafts. Yega participation in the Popondetta market held

each Saturday morning doubled in the 18 months prior to this study but still only about 15 families per week sent in produce for sale. Larger numbers of Yega attended on Saturdays following the fortnightly administration pay day than on the alternate Saturdays. Cash income obtained by Yega also more than doubled in the same period (from a weekly average of $1.35 per participating family in January 1963 to $2.80 per family in July 1964).

iii. Gifts from relatives in paid employment. In 1964 this was the main source of cash income of most Yega villagers. Almost invariably the young men in paid employment sent monetary gifts home to their relatives in the village. A sample group of 18 such workers earning an average $610 per annum in cash or kind remitted an average of $90 per head per annum to their relatives in the villages.

iv. Gambling. As gambling is illegal, people were reluctant to divulge details. Nevertheless, for some men gambling constituted an important source of income. The stakes in domestic games of 'Lucky' were usually betel nuts, but in games with outsiders always cash. Yega gamblers aimed particularly to relieve the workers on nearby plantations of their wages. On one observed occasion a Yega man won $86 in one night in such a game.

Sources of additional income for two sample groups are summarized in Table 3 below:

Table 3

Additional sources of cash income of Yega villagers during 1962

Classification	Personal effort	Gifts	Other*
Holders of cocoa blocks (sample of 25)	8	17	2
Non-holders of cocoa blocks (sample of 14)	8	9	Nil

* This includes savings and gambling (one informant in each). Some persons received income from two sources.

The holders of blocks received more gifts than non-holders of blocks. The main reason for this is that most blockholders had sons or brothers of working age. Many of these worked in paid employment and, by making gifts to blockholders, were ensuring reciprocity of gifts in the future. Table 3 shows only gifts received by people living at home. Monetary gifts were rarely given by the village people but when the 'outside workers' returned for holidays in the village they were fed, boarded and feasted free.

474 grown. These were mainly used as food by the co-operative workers,
241 but in times of local food shortage they were sold to other vil-
[438] lagers. All workers, Yega, Ahora and Beuru, lived in garden
[484] houses on the Ononda garden site during the week and returned to their home villages only at week-ends.

The establishment of gardens and the work organization were similar at Garara. There also, peanuts and sweet potatoes were the main crops. According to an informant the value of the first harvest in 1947 was $190.

[797] Unfortunately for the co-operatives, the mission organizers soon disagreed with Samuel, for the Rev. Benson's diary on 1 April 1947 speaks of him as a 'wife-deserter, and who in consequence has been put off the committee of the G.P.T.' (and presumably placed under Church discipline). It was also stated by informants that there was dissatisfaction among shareholders with Samuel's rather secretive management of the money.

At this point the G.P.T. ceased to function and the co-operative
[797] efforts of the Yega proceeded in different directions. The Anglican Mission sponsored a Christian co-operative which became known as
[ ] the Gona Co-operative Society, while Samuel Ungega organized the Gombe Co-operative. He was supported by most members of his own clan (Kurou), some members of his new wife's clan (Jambapa), a few members of other Yega clans (Seseko and Konambo) and also by five members of the neighbouring Bapa sub-tribe. Four of the Bapa men were married to women of Kurou Dunemba sub-clan which joined the Bapa people in past times but with whom Yega Kurou still maintained exogamous relations. The fifth man was a brother of one of these four, having no direct affinal link with Samuel or other members of Kurou clan.

[657] Early in 1948 the foreman in charge at Ononda was sent by the mission authorities to Boreo to instruct people in co-operative techniques. At about the same time the Ahora and Beuru labourers were forced by the Administration to return to their villages because of labour problems at home. Samuel's Gombe Co-operative then abandoned farming at Ononda and restricted its operations to the Garara site, where all land rights were held by members of the Jambapa clan, the clan of Samuel's wife.

[484] All members of the Gombe Co-operative workforce, including the Bapa men, lived in garden houses on the Garara site from Monday to Friday each week. The Jabapa landholders permitted the members of other clans and the Bapa men to use nearby secondary forest for their food gardens. This saved travelling time and permitted the maximum time to be spent on the co-operative gardens.

The Gombe Co-operative continued operations during 1948-9 but because of opposition from the mission it never gained popular

roof, the store had to be rebuilt by the co-operative in 1954, on a site adjacent to the original one; it was replaced by a permanent building, constructed on a new site only 100 yards from the wharf at Cape Killerton.

Marketing was of minor importance for the first ten years of the store's operation. Although there were numerous coconut palms in the shareholders' villages, the subsistence demands on them were heavy. Very little copra was offered for sale at the store before 1962 but production increased following a renewed emphasis on the crop by the Department of Agriculture's Extension Service. Copra turnover increased from nil in 1961-2 to $254 in 1962-3 and $1104 in 1963-4. There were at the time of this study few other cash crops in production but labour was an important source of cash.[1]

By contrast the store's retail function was rapidly established. It was for 11 years under the competent control of its first appointed manager, Mr Hankin Kombega, a local Yega man who was also secretary of the society. Within two and a half years from the start of retail trading, a net profit of over $2000 was disbursed to shareholders at the rate of $0.25 for every $2 spent. Only two other rebates were paid - in November 1960 and December 1962; the rebate which would normally have been paid about the end of 1957 or early 1958 was diverted to the construction of the new store. The average rebate paid to shareholders in December 1962 was approximately $3 per head and for Yega shareholders the average was $5.10 per head. Although these amounts may sound small, it should be borne in mind that the share basis was only $10 per head. In addition, the rate of rebate (in 1964, $0.10 per $1) was much higher than that paid by co-operative societies in Australia. The inducement offered by the rebate system did influence Yega purchasers in their choice of a retail store. Of a sample group of eight men questioned, two claimed that all their purchases were made at the co-operative store, four others estimated that over half their purchases were made there, one estimated less than half and one was uncertain.

The Gona Villages Native Society Ltd was managed by a chairman, secretary and board of nine directors, all Papuans, elected by the shareholders. The board met each month and its minutes were sent to the Co-operatives Inspector in Popondetta for approval or veto. If decisions were vetoed, adequate explanation was given.[2]

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[1] See p.65.

[2] An example was the rejection of a board decision to increase the purchase price of copra from 3½d. to 4d. per lb. Detailed costs were calculated to show the board that at 4 d. (3 cents) per lb. they would make too small a profit margin.

474 443 [657] [454] The finances of the store were under continual surveillance both by the local inspector and by the Assistant Registrar of Co-operatives in Port Moresby to whom regular reports were submitted by the inspector. A general reserve fund was maintained and was fully invested. Provision for depreciation was made every six months; this money was banked so that the provision of a new store building would be possible within about ten years.

[438] The Cape Killerton store operated as a normal retail trading store but over three quarters of its business was conducted with its shareholders. In January 1963 there were 578 shareholders in the Gona villages co-operative store, of whom 108 (19 per cent) were Yega people. Yega shareholders purchased 34 per cent of all goods sold[1] while non-shareholders bought 13.5 per cent.[2]

[434] The high rate of spending of Yega shareholders relative to the total membership was because the Yega people live nearest to the store at distances ranging from nil to four miles, and because the Yega probably received a higher cash income than the other groups.

464 167 [368] [871] [777] [434] The Yega had since the early 1930s been within walking distance of one of the best mission schools in the Northern District, with a European teacher permanently on the staff. In consequence young Yega men, who almost without exception left the villages to enter paid employment, were able to obtain skilled and semi-skilled jobs. In a sample group of 18 such wage-earners interviewed, the average remittance to relatives and friends in the village during 1962 was $110 p.a. As 40 per cent of the adult male work force was absent in wage-employment, a considerable amount of cash was being injected into the Yega economy. In addition, some Yega obtained a regular cash income from produce sold in Popondetta market (see Dakeyne 1965:102 ff.).

474 443 438 Expansion of membership in the G.V.N.S. Co-operative had almost ceased in 1964: 561 members in 1958 increased to 578 in 1961. As a branch store was opened at Buna in 1962, effective shareholder support for the Killerton store seemed likely to diminish. In any event there could be no major increase in shareholder numbers among the Yega, for nearly every adult Yega man resident in the area was already a shareholder in the co-operative. The bulk of the store's business was done with its shareholders but non-shareholding friends, such as members of a shareholder's family or visitors from the towns, were asked by shareholders to use their share numbers when making

[TEXT CONTINUED ON PAGE 67]

[1] Calculated from the rebates given in December 1962.

[2] Calculated on the basis of sales for the months October-December 1962.

purchases. In this way the shareholders obtained additional rebate benefits. In general, however, sales to non-shareholders correlated fairly closely with the presence or absence of small coastal trading vessels at the wharf.

Most of the buying at the store was done by men. There were no women shareholders, but wives and daughters used their husbands' and fathers' share numbers when purchasing goods.[1] The men were discriminating buyers and a man who had walked some miles to the store to buy a specific item would usually stand for a while surveying the goods displayed and asking a question or two about prices. After the purchase was made, usually of only one or two items, the buyer left the store, but usually stopped to chat at Surilai village on the northern side of the store before going home.

An analysis made of the spending patterns of a group of 27 Yega shareholders over a two-year period (January 1961-December 1962) showed that of a total expenditure of $1148, 49 per cent was spent on food (mainly tinned meat, tinned fish, rice and sugar), 11 per cent on tobacco, 11 per cent on clothing, 7 per cent on kitchen utensils, 3 per cent on garden tools and 17 per cent on miscellaneous items including torches, soft drinks, kerosene, matches, fishing gear, etc.

The most sought after foods were those with high protein content - tinned meats and fish. Only one bicycle (costing $52) was sold during the two years surveyed. The low rate of spending on garden tools is noteworthy, considering the importance of gardening in the Yega economy; but axes and bush knives were carefully guarded and, being very durable they needed only occasional replacement.

Almost every Yega child over six years of age and every adult of both sexes owned at least one item of European-type clothing. On working days, cotton skirts were worn by the girls and women, and shorts or cotton loin cloths by the men, but tapa (bark cloth) skirts were preferred by the adolescent girls and tapa boavo (bark loin cloth) by the older men for Sunday wear. Most people preferred to purchase their clothing requirements from the wider range available in the larger Popondetta stores rather than from the co-operative.

Retail trading showed a remarkable increase from 1961-2 to 1962-3. The turnover doubled during the financial year but a fall-off in trade of about 12½ per cent occurred in 1963-4. This situation probably resulted from lower spending by Yega shareholders,

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[1] In the course of six or seven visits to the store I can recall only once having seen a woman at the counter.

CHAPTER 1 - INTRODUCTORY

Location and facilities

131 Inonda is situated about eleven miles from Popondetta on the Oro Bay road. Up to the present, access to Popondetta has been dependent on the state of the Girua river but with the completion of a bridge later this year all-weather access will be ensured. Inonda lies within the Orokaiva culture area and is served by the Higaturu Local Government Council. Administration patrols visit the village once or twice annually.

368 [871] [787] The nearest school is about six miles away across the river at Hohota. Some children attend this school spasmodically and a few board at church schools at Popondetta or Embi. Others do not go to school at all. There is an Anglican church in the village though it is little used except when an itinerant priest happens to be passing by.

1198 [366] 439 Kerosene, tobacco, sugar, salt and other household requirements are usually purchased from a small trade store about three miles distant but larger purchases are made in Popondetta. There are four main items of traditional trade which appear to follow particular routes. As betel nuts do not grow well in Inonda these are bartered or purchased from inland tribes (usually through relatives) and the lime which is chewed with them is acquired from the coast. Traditional valuables (hambo) are acquired most frequently by barter with the coastal people, but birds' feathers for making head-dresses (di) are obtained from the Managalas tribes in the mountains in exchange for dogs, money and other items. The advent of shotguns has reduced the trade in feathers to those of birds of paradise and other relatively rare species. In bygone days clay pots and wooden bowls were traded from the coast in return for feathers and other valuables but with the advent of cheap imported utensils this trade has ceased.

Physical features

133 Topography: The Inonda lands lie partly on the flood plains of the Girua and Sambogo rivers and partly in the

duction is at present so small that it is not difficult to take coffee or cocoa on foot and there is every indication that transport services in the roaded parts of the district will be available before output is greatly increased.

Coffee is sold to the Orokaiva Coffee Growers Society in Popondetta and cocoa to private traders. Cash is paid at the time of sale and in the case of coffee a bonus is also paid at a later stage if profits permit. Marketing facilities cater adequately for present production.(1)

The situation regarding perishable products is quite different. The only outlet for fresh fruits and vegetables is at the Popondetta market which is held every Saturday. Market prices are low (by comparison with those at Port Moresby or other larger markets) and most commodities are oversupplied. When produce is taken to market it is not uncommon to have to bring some back or discard it. The villagers could supply considerable quantities of fresh vegetables (particularly taro) if the demand for it could be increased. There is usually a keen demand for fresh fish, pork and poultry, and the market could absorb much more than is at present supplied.(2)

Some implications for policy

The surplus of underemployed labour among those villagers who do not work for wages (and local wage labour will soon cease with the completion of construction contracts) can be used economically in primary production in two ways. Firstly people can be encouraged to plant additional cash crops. It has been shown that this is hindered at present in Inonda by problems of land tenure. If these were overcome an increase in productivity would probably result, though it would be limited by the present traditional demands on time.

Secondly, a small proportion of the more active and

(1) For details of the export market for New Guinea coffee and cocoa see Reserve Bank, 1962.

(2) A detailed study of the Popondetta market by R. B. Dakeyne is now being prepared for publication in this Bulletin.

Four Orokaiva cash croppers

R.G. Crocombe

121 The four entrepreneurs dealt with in this paper have established themselves by cash-cropping and have subsequently expanded into retail trading. These brief case studies seek to identify some of the factors which may facilitate the emergence of entrepreneurs and some of the inhibiting factors that restrict their success and future development. Where applicable, comparisons are made with villagers of two Orokaiva villages previously studied: Inonda (Crocombe and Hogbin 1963) and Sivepe (Rimoldi 1966).

Introduction

438 Before European contact there was some trading in ornaments, lime, pottery and woodenware among the Orokaiva, but nobody subsisted exclusively or even principally from their production or marketing. With the advent of Europeans the Orokaiva became 177 familiar with the full-time entrepreneur who earned his living by 402 selling wares produced by others, by providing services such as 438 transport or the recruiting of labour, or by producing cash crops using hired labour. There are few Europeans in private enterprise in the area who do not engage in all three classes of enterprise.

The advent of the entrepreneur resulted in significant changes in the Orokaiva way of life. New goods were made available and opportunities for paid employment were created. During the past 402 two generations most Orokaiva men have had some direct contact 438 with commercial enterprise, both as customers and as employees, but until recently few have had the capital or training to engage in the entrepreneurial roles themselves.

Entrepreneurial activity (using the term to include trading and any regular income-earning activity which involves the employment of persons outside one's nuclear family) is a recent phenomenon among the Orokaiva.

101 Field work for this study was carried out in spare time during 114 1962-65, as a sideline to other studies, by the writer, assisted by Mr Cromwell Burau and Mr Edric Eupu. Information was collected 126 on land and food gardens, cash crops, trading, processing, transport, other property, income, work patterns and community leadership.

the price at which he bought (e.g. a knife bought at 87 cents would be sold at 90 cents).[1]

Irrespective of profits, stores are both a convenience and a source of considerable prestige to the owner.

No records of customers were kept, but from casual observation it appears that customers are either persons who are unrelated and not resident in the same locality or close kin and close friends. The more distant relatives and the residents in the owner's village often go to considerable trouble not to buy from the local entrepreneurs. They justify their avoidance with stories which depict the trader in a personally unfavourable light, though some point to the lower prices and wider range of goods in Popondetta, and others to the advantage of buying from local co-operatives which provide rebates and benefit everyone, rather than from private stores with higher prices and individual profit.

These arguments should apply equally to the customers of the entrepreneurs, but they do not seem to in practice. I assume that this is due to the fact that the entrepreneurs do provide credit, assistance with life crises and other advantages (including the attraction of close association with men of prestige) to very close friends and kin, but decline to provide these privileges to more distant kin and neighbours. These people feel entitled to special consideration and are affronted by refusal. C, the trader with the largest turnover, built his store in a village other than his own[2] and most customers come from that and three neighbouring villages. Most people of his own village of Hanau buy from a co-operative store further away. A's main clients are plantation workers, as most of his fellow villagers use the co-operative even though it involves a long walk. D's store was located on a main road until a re-routing of the road left him without his main source of clients - people walking along the road.

Since 1964, D has been buying cotton piece goods which his wife makes up on her sewing machine into skirts, dresses and shorts for sale in the store. Demand for these goods is greater than the supply and a girl is now hired part-time to assist with sewing.

A, B and D sell small quantities of garden produce or hunted meat at irregular intervals at the Popondetta market.

A undertakes commercial processing for other persons, having established a cocoa fermentary with the help of agricultural officers in 1962. The building cost $500 from his savings and an

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[1] Having limited experience in handling money most of the entrepreneurs round prices to the nearest ten cents as far as possible.

[2] The other three all have their stores adjacent to their homes.

472 informal 'company' was formed to operate the enterprise. There
245 were sixteen shareholders, all residents of A's hamlet or the absent sons of residents. A contributed $144 in cash while the
[471] others contributed $10 each. This money is used as working capital
[454] and placed in a Cocoa Account at the savings bank. It is controlled by A's eldest son, who is referred to as chairman of the company and is generally responsible for the handling and marketing of produce.

245 Wet cocoa beans were bought from villagers from moneys in the
438 Cocoa Account at 3 cents per pound and fermented and dried. They
439 were shipped through a local trading firm and sold on the London market. The fermentary has not been very successful because most villagers outside A's hamlet sold to a European fermentary which collected the beans and paid a higher price. Another, and perhaps
[628] more important, reason that the local fermentary was not patronised lay in tensions and divided loyalties within the neighbouring villages. From early 1962 until May 1963 only 7,080 pounds of wet cocoa beans were processed using the temporary fermentary. No
[454] later figures are available but the credit balance in the Cocoa Account rose from $174.07 in June 1963 to $470 in January 1966.

472 All four entrepreneurs aspire to owning a motor vehicle. A's
493 early attempts were declined by officials,[1] and his attempt to
494 establish a bus service in 1963 (for which he had sufficient finance) was thwarted when the only licence was granted to an expatriate. He still gives top priority to buying a vehicle for his own cartage and for hire. B had the funds but not the driving skill.

472 The difficulty of acquiring a skill such as driving is often
493 overlooked. For a person in a rural area it is usually necessary to go to a town and get a job. Even then one may spend several
[484] years in an unskilled job without getting the opportunity to learn
[464] to drive. Few Papuans have vehicles and most people are naturally reluctant to allow others to practise on their vehicles. B's son has now tried unsuccessfully for three years to find an opportunity to learn to drive. C and D have each been seeking a cheap second-
472 hand vehicle for some time, but the likelihood of establishing a
493 successful carrying business is doubtful, for overheads are high,
494 business would probably be irregular and many of the potential customers would have difficulty in paying. In the long term, as incomes rise, there will certainly be openings for such ventures. In the meantime, however, there is a danger that a transport business would survive only if it was subsidised in part at least from

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[426] [1] Official approval was then necessary for indigenous people to go
[656] into debt.

Appendix B

The Ombi-Tara environment and population

131 [133] Ombi village is in the Kokoda sub-district about twenty-seven miles from Popondetta along the main Popondetta-Kokoda road. It is situated on top of a plateau up a steep escarpment, about 250 yards from the main road. Tara is about two miles from Ombi and straddles the access road which runs through the converted land occupying part of two of the blocks. It was previously about two miles further away and was moved to its present site in 1964 after survey of the land to be converted was under way.

133 [361] The Kumusi River flows close to the Popondetta-Kokoda road, about four hundred yards from Ombi village. Ombi village was formerly sited next to the river but was moved to its present higher location in about 1957, reportedly to escape the mosquitoes.

871 872 [368] The nearest school is conducted by the Administration at Ajeka, about two miles away. Most children of the appropriate age attend school daily. Several of the older children board at schools in Popondetta while some children do not attend school at all.

366 438 439 The nearest trade store is at Ajeka but this is seldom open, and most purchases are made from the store operated by a European planter at Awala, a distance of seven miles. Clothing and larger items are purchased in Popondetta.

134 The Ombi-Tara lands are part of the Higatura land system which contains a considerable proportion of good land with reasonably fertile soils, suitable for many arable or tree crops as well as pasture.[1]

132 137 The most important features of the climate are the generally heavy rainfall, and the almost uniformly high temperatures and humidities throughout the year. Rainfall ranges from 120 to 150 inches annually and may well be greater in the higher areas, including Ombi-Tara. These climatic features are reflected in abundant plant growth. At Ombi-Tara rainforest covers much of the surrounding land, which is marked by a series of steep ridges.

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[1] See C.S.I.R.O. 1964.

245 By a fortuitous circumstance, the land selec-
423 ted was regarded by all Yega as communal
hunting land. It had belonged in the past to
[614] the Bowori clan, but when they were wiped
[726] out in inter-parish warfare it had never been
re-allocated among the remaining clans. No-
body, therefore, had to be compensated for
245 the loss. The Yega followed the DAO's advice
654 and over the next two years cut down a large
657 area of forest and planted shade trees and
young cocoa. In order to supervise this work,
the Agriculture Department built a small
village at Ononda to house a field instructor
and a group of trainees.

245 Many people came to believe that their
433 future prosperity lay in the development of
cash cropping. As the cocoa blocks were a long
361 walk (four miles) from their homes in Beporo
245 village, many decided to move inland; this
was a rational decision. An additional incen-
[484] tive was the development of the weekly market
[443] at Popondetta. With the rapid growth of the
town since 1960 there has been an increasing
361 demand for fresh fruit and vegetables. Many
443 Yega have taken advantage of this to sell sur-
438 plus produce for cash. Residence in the inland
settlements reduces the distance from the mar-
ket. By 1964, over half the population was
living in the new villages.

361 In addition to the dispersal of population,
178 the breakdown of traditional clan groupings
614 continued. The inland settlements are all
numerically smaller than Beporo and in all of
them the old homogeneity of clan membership
has disappeared. A man chose his house site
for convenience and access to his place of
work, rather than on the basis of his kinship
ties.

361 The most radical change occurred in the
establishment of Binjapada village. It is a
collection of fourteen households, spread for
over half a mile, along a narrow strip of grass-
361 land. Six of the occupants had been allocated
423 cocoa blocks in the near vicinity and four of
these men attempted to locate their houses on
the projected extensions of their cocoa blocks;
this represents the beginning of a dispersed
pattern of settlement foreign to the Yega tradi-
tion of clan-based clusters of dwellings. As no
boundary surveys were carried out, one man
located his house on his neighbour's block.
[P.15-B]

231 they marauded gardens, so that I assume that a good number could be rounded up if Sivepe were to hold a major feast. They were not at all accessible, however, and none were caught during such hunting [422] expeditions as the people organised. On the occasions when marauding pigs were shot, the pigs were always recognized and presented by the killer to the owner who then presented his pig to some other person. No doubt these pigs were a resource and perhaps I was at fault for not taking a census, but with no pigs visibly in evidence, I considered these assets as too shadowy. In Inonda, where Crocombe and Hogbin reported 12 pigs in 1962, only two were left in 1966. 235 My prognosis for pigs as an economic resource is poor. The fowl [262] population, on the other hand, had remained very much as it was at these earlier investigations: eggs were discovered and eaten occasionally, but the use of the fowl was for feasting when visitors [239] had to be entertained. It was also noticeable that the roosters were deprived of many of their choicest feathers at a time when [293] headdresses had to be refurbished for dancing or spears decorated. [411] At a visit from Togahou, which by traditional etiquette, as I understand it, should have rated at least one pig, the people of [594] Sivepe killed only fowls. This was, I was told, because there were no pigs available; hence the fowls were a proper substitute. It would seem that the fowl is rapidly becoming the substitute for the pig on many ceremonial occasions, though not yet for all occasions.

438 There is a great shortage of both pigs and fowls for these ceremonial occasions. Pigs are bought for high prices ($20 to 439 $30)--from neighboring villages and even, as Crocombe and Hogbin [435] say, from European planters. Fowls tend to be made available on big occasions by whoever has them so that their number does not increase--a few dozen in each of the two villages.

241 We may distinguish, among local plant resources which yield 311 economic products, those plants which are native to the district and those which have been introduced by Europeans for cash cropping purposes. Starting our survey with the former of these two categories, we shall deal first with food plants and next with economic trees. I have tabulated average food plants per household as shown for Rimoldi's Sivepe sample and as shown by Crocombe and Hogbin for Inonda (Table 7).[A] The pattern for the two places is remarkably similar except that sweet potato is a notably more important crop at Inonda than at Sivepe. The reason for this is that it is more dependable under drought conditions such as often occur at Inonda and also, it seems to do better at Inonda. The fact that the Inonda taro acreage is higher than the Sivepe acreage reflects no more than the higher yield per acre in the latter place. There is no evidence that any major change occurred in the quantities grown or the methods of cultivation over the period with which we are concerned, though a small increase in the consumption of Xantosoma taro may be a symptom that people may be starting to

A [See Cat. 116, p. 212--Analyst]

241 devote less time to the cultivation of the more laborious (but more
311 favoured) Colocasia taro.

During the post-eruption period there have been, as we shall
[433] see below, many pressures on the Orokaiva to reallocate their working time, by raising the standard of village building construction, by taking on outside labour to raise taxes and buy luxuries, by increasing the acreage in cash crops. In many cultures dependent on swidden agriculture these pressures have led to more slipshod methods of cultivation, or smaller plantings or shorter fallowing periods. Among the Orokaiva, the only effect so far has been, in all probability, a decline in the surpluses grown for feasts. This is a change to be discussed later and related to religious changes. In Sivepe there would clearly be a danger, if cash-cropping was expanded to the extent some administration officers would like to see, that fallowing periods in subsistence gardens would need to be shortened. There is no evidence that subsistence gardening, so far, has been affected by cash cropping, as both the acreage and the time devoted to cash crops is too small. (For details of time allocation to activities in both villages, see Table 8.)

245 The average Sivepe family, according to Rimoldi, has 62 cultivated trees of local origin from which crops are gathered in season. No corresponding figure is available for Inonda, but it would be about 30. The list of most important trees varies a little between the two districts because of differences of climate and soil.

Sivepe	Inonda
Coconut	Sago
Breadfruit (oga and eumba)	Coconut
Betelnut (areca)	Betelnut
Sago	Hauga nut (tauga)
Pandanus	Breadfruit
Tauga nut (cycas media)	Pandanus
Puga nut (terminalia okaria)	(Ajimo)
Bark cloth tree (ajimo)	
Mango	

An important difference between the resources of the two villages is that coconuts at Inonda will yield copra; hence, a copra drying house was built and this has been and can be a source
[262] of income. At Sivepe, the flesh is thinner and coconuts are grown for drinking, cooking, feeding dogs and chickens, while the nuts are also eaten regularly and form a useful source of protein. Another
249 difference is that neither betelnut nor tauga and puga do well at all in the Inonda district and quantities are negligible. The lack
276 of betelnuts is felt very strongly, as the Inonda people are as fond of chewing it as other Orokaiva. Hence, it is usually obtained
438 A [See Cat. 116, p. 213--Analyst]

276 from relatives who live in the mountain districts or else obtained
439 by barter, or bought from other villages or at the Popondetta market.

Sago is made and eaten when other crops fail, but the plants
245 are also used as building material. As the supply of sago is very
[262] limited in both villages, the plants are highly prized. Inonda people owned only 21 trees so that the bulk of supplies was obtained from other areas, e.g., from wild sago trees over which they claim rights. In Sivepe, the total supply is in the vicinity of, probably, 300. This suffices for the local need, both as an occasional supplementation of the food supply and for building, when a great quantity is needed.

[799] The special position of sago among economic trees was shown clearly in Miss White's description of the building of Sasembata mission station shortly after the eruption. This was a big project in which all the surrounding villages (including Sivepe) collaborated. Labour was given free and so were all building materials--apart from sago for which payment was expected and made. I was told by informants this was because sago is a cultivated, not a bush tree. During my field work period, the mission again needed sago roofing for expansion and repair of buildings, but this time no payment was made. However, each household was asked for a contribution of only two strips of roofing. Thus, it was again treated as a resource of special value as other materials were not supplied in such strict rations.

The ajimo tree, used for manufacturing bark cloth was not reported in Inonda by Crocombe and Hogbin but we did find a small
[287] quantity growing. Though bark cloth is only used for dancing costumes nowadays, in both villages, these dances still take place from time to time. The women's clubs have stimulated the production of painted bark cloth for sale, but this has not led to extra plantings. Sivepe's supply of ajimo trees was only one or two for most households, sufficient for an occasional festive garment with none to spare, but there was an abundance of ajimo in some other villages in the Sasembata district. Here we may notice a definite change between the pre-eruption period and the present at pre-eruption Inonda and because at Pamba, bark cloth was still the daily wear for everybody, so that the ajimo was an important economic tree. With this exception, there would seem to have been no change in the resources of economic trees of local origin.

The three introduced cash crops of significance in the two
241 villages have been rice (pre-eruption), coffee and rubber; in
177 both villages, one man grew a little cocoa. These industries, which developed in intensive interaction with Australian authorities, are perhaps better discussed in detail in a later chapter when these
[243] relationships are analysed. Rice plots were developed in the period between the second world war and the eruption; the plots in both

628 Similar cooperation occurred in other specific tasks such as the organising of a dance at Saiho hospital, the marking off of ward boundaries, etc. The groups cooperating in this manner had no history of multi-village economic organisation; this was an innovation. There was, however, a long history of military alliances, kinship and friendship links and feasting relations between contiguous villages. I collected the kindreds, up to two degrees removed, of 51 Sivepe informants, recording the birth place of each member. I found that the list of natal villages included 76 situated more than one mile from the site of New Sivepe, the great majority being situated in the area within a three mile radius. But strictly speaking, these were not consanguineal links between villages as the consanguineal networks of the various families differed considerably in location. Table 9 shows just how individual these networks were but it also shows that there were 10 villages where more than 10% of Sivepe informants have consanguineal links: these are places with which relations have always been very close as periodic contact was maintained with all these consanguines; meeting them less than once a year would not be quite right. Today, meetings are much more frequent, as they tend to occur at the Sunday church services.

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Section 4: Other Contacts with the Waseta "Tribe"

While contacts with people from within the Sasembata district are far more frequent than contacts outside it, there are only few families who do not have some kindred, with whom they can trace connection in the patri- or matriline, resident outside the Sasembata district. Considering that this district comprises an area of no more than some 20-25 square miles, such connections will occasion no surprise. I was struck, in fact, by the relatively small number of these connections--a full statistical analysis of the kindreds collected has not yet been completed, so that I cannot give statistics. They were with a relatively small number of villages, almost all from the district Williams marked as belonging to the Waseta tribe. Even the connections with these few villages have special explanations: incidents of warfare explain the present links with the Isivita villages and with Togahou. The links with Soroputa and Agenahambo are explained by the resettlement of these two villages which previously were situated much closer to Sivepe--their land actually adjoins Sivepe land. The close link with Awala (three miles from Sivepe) also has a special explanation beyond common clanship: Sivepe people were dependent upon Awala clay for the manufacture of pottery, an essential commodity until after the second world war. I have listed a few more villages which are "Waseta" but not "Sasembata," such as Waseta, Koropata, Ilimo, but these are mentioned only once or twice.

[438]
[323]

A [See Cat. 116, p. 214--Analyst]

177 829 [203] concepts drawn from the scene of world affairs. While among the Orokaiva, I heard talk about Vietnam, Indonesia, Africa, India. The political orientation displayed was a mild kind of nationalism, and a sense of closeness to newly independent non-white states. But the information, derived from radio broadcasts and speeches by councillors, introduced an acculturative kind of perspective. Its dissemination is being actively encouraged by the Australian authorities.

465 [464] Use of money: Before the eruption, money played a very minor role in village life. It was earned by men who were away for limited periods working on plantations. Money wages on plantations were, and are, extremely low; wages for agreement labour in 1962 were, for instance, $39 per annum for the first year of which $12 is paid out in monthly installments and the rest at the end of the year. In the second year, the rate rose to $45.50 p.a. (Howlett, 1965) Urban wages are a great deal higher than this; most Sivepe men who were absent on employment worked on urban jobs. At the same time, a regular income was derived from coffee.

464 435 438 Sivepe men were simply not interested in jobs at plantation rates of pay, nor were they interested in "carrying" jobs for the government even though wages in that case were higher. They were also indifferent to selling their garden products on the Saiho and Popondetta markets, as there were frequent gluts, prices were low and carrying goods to market was an unduly arduous task.

436 511 Money was used largely to buy goods in the luxury rather than the subsistence sphere. Money was essential for payment of taxes and for a minimum of clothes, often acquired cheaply at jumble sales. Otherwise, it was used to buy tobacco, food for feasts, kerosene mainly used for feasting occasions, cartridges for hunting, again for feasts. Among the larger purchases made were radios, pressure lamps, bicycles, tools; all these, however, could never be paid for with current income. One had to depend on special windfalls: a gift from a relative in town, a bride price. Money was not only for spending, however; it was also for saving. I shall refer to the organisation of corporate saving later; in addition a number of Sivepe men had savings, of the order of $10-$20, sometimes more, hidden away. This money was kept for special occasions, but in addition, the very fact of possessing it was regarded as important. I was once told that Europeans were powerful because they had money; the Orokaiva could get power only if they too possessed savings.

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436 437 [461] If money was definitely highly valued, it was only to a limited extent regarded as a standard of value. If we accept some model such as was suggested by Salisbury (1962), we may say that the Orokaiva have three spheres of exchange: a subsistence, luxury and ritual sphere, while bank notes are used for special, often ritual occasions. In the acquisition of luxury goods of any kind, including money, the Orokaiva tend to weigh the benefits gained by them against their cost in time and unpleasantness and against the benefits that can be gained from other investments. Money is, in general, wanted only if it can

654 After resettlement in Awala and other villages, the government
731 made no attempt to discourage the resettled people from making contact with other villages, as long as they did not begin to reside within the area that was still restricted in May, 1951.

Section 3: Morale of the Relocated Community

731 In earlier chapters, I have already drawn attention to the
823 widespread homesickness of the evacuees and their insistence upon maintaining identification with the homeland. Undoubtedly, separation from this land compels the Orokaiva to abandon many of his customs and traditions of the past, because so many of these customs and traditions [852] arise out of association with the land. To give only one example, a ceremony thought to be necessary for the survival of a new-born child is, even now, performed in a family garden. Separation from the family [794] land makes such a ritual impossible. At Ilimo, traditional rituals were replaced to some extent by the unaccustomed frequency of Christian religious services which were always well-attended. This, however, was at no time accepted as a substitute for the old way of life.

731 Naturally, in the circumstances, people did not feel any pride
177 or satisfaction in their situation in the evacuation camps. Once they were resettled in new villages on their own land, they felt pride in the new villages and in the "new way of life" they had adopted. Sivepe [438] was proud, for instance, of having discarded its pigs. On one occasion they were bargaining to buy a pig from neighbouring Garombi which still [626] had its pigs. During the bargaining, a Garombi man taunted Sivepe about its lack of this kind of treasure. The Sivepe people haughtily called off the sale. Such pride and interest in innovation was associated with a sense of security regarding land tenure and Sivepe's status in relation to other villages. If Sivepe had not felt secure in its ideology of the "new way," there would have been dismay at Garombi's taunt about the lack of pigs. But nobody in Sivepe doubted the rightness of the choice that had been made.

27: Schwimmer E-5 (1966-1970) 1979 OJ23 Orokaiva OJ23

435 the latter. Also, migrants normally leave behind a family member
436 with the task of looking after the land (*simbari*) in a technical,
magical and juridical sense. Often he also leaves behind a wife for
169 whom he is saving brideprice but who meanwhile must be looked after by his relatives. Money sent home therefore covers not only feasting contributions but also the function of *simbari*. This is not because village people would not perform such services free of charge but because, when a man earns money, those who help him earn that money are entitled to their share.

169 If we look only at the relations of production migrants have in their jobs, they seem totally 'alienated' (cf. Parkin, this volume).
461 Not only have they no control whatever over the product of their labour but this product lies entirely outside their conceptual
[571] universe. Yet these migrants avoid proletarianization in the full sense because they continue to have a stake in the village environment, which has its own economic, political and ideological base.

435 Our remarks above apply similarly to the village cash-crop sector. With the exception of coconuts, the use value Orokaiva see in European cash-crops is either very limited or non-existent. Coffee and cocoa are classified as non-foods, rubber latex as an unusable substance. Even the coconut, though an important food when fresh, represents no use value to Orokaiva when dried into copra.

This lack of perceived utility has not stopped cultivation of these crops on village land nor their processing by village-purchased
[245] machinery. Everyone irrespective of age is growing coffee. Those who are pressed for time tend to give priority to coffee and to partially replace their plantings of taro with 'German taro' – less valued but less laborious.[21]

245 Growing coffee is not considered pleasurable like growing taro.
824 When suggesting to an informant that coffee trees have a sweet smell,
461 I was firmly told: "*We* think the smell is dreadful". Such feelings go to show that the division between the spheres of use value and exchange value is not purely analytical but corresponds to a conceptual boundary between two models of life and work, and that Orokaiva try to keep this boundary clear. Coffee is grown because it takes far less time than it would to grow subsistence crops for the market, but the grower feels alienated from it while he feels
[438] identified with the subsistence crops. A small quantity of subsistence crops – surplus to requirements – is in fact sold in local markets for consumption by local people, but growers take the same care with them and regard them in the same way as the food they eat.

461 It is paradoxical that the work represented as introduced by Jesus
[177]